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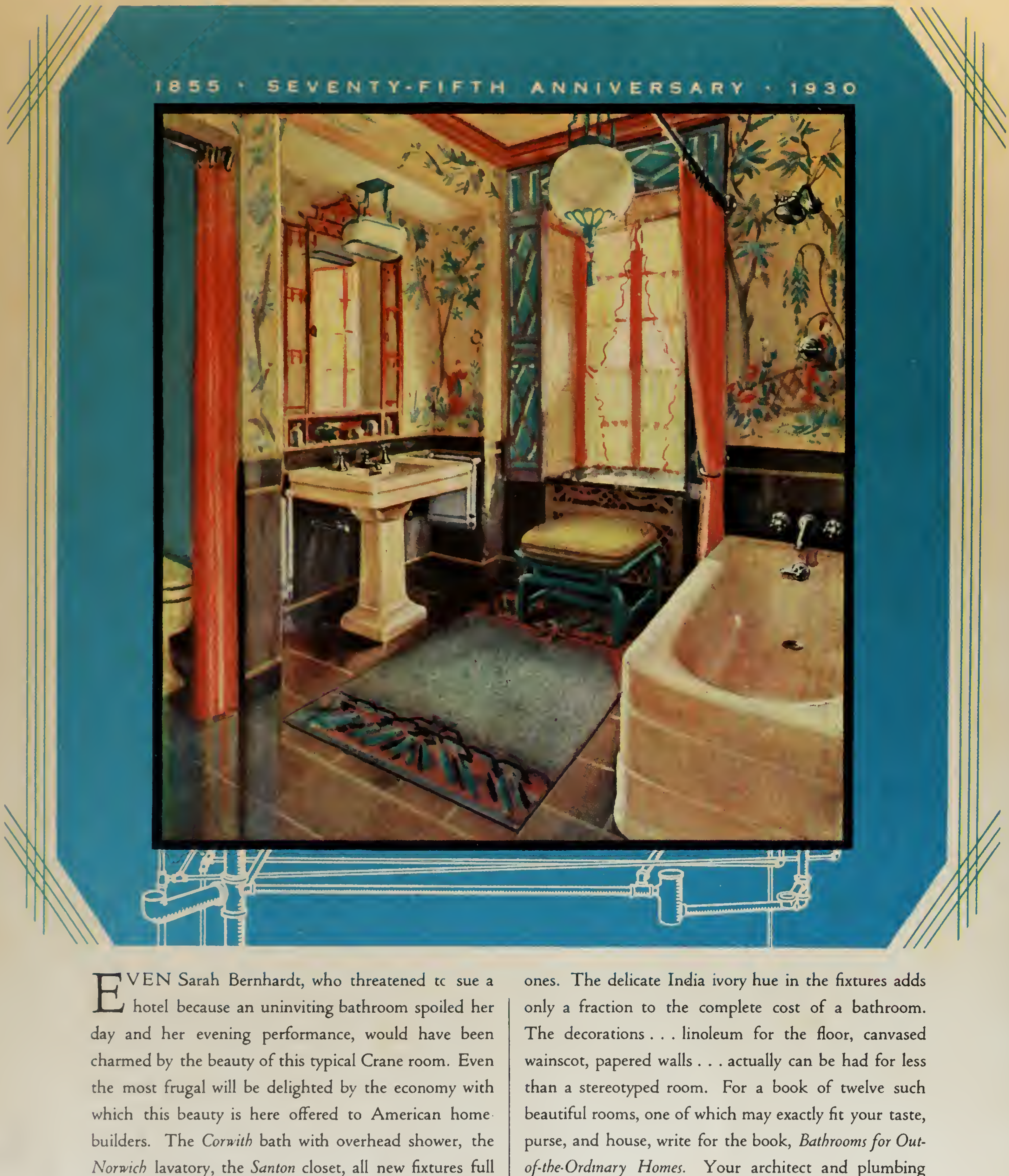
Fortune

ne Dollar a Copy FEBRUARY 1930 Ten Dollars a Year



EVEN Sarah Bernhardt, who threatened to sue a hotel because an uninviting bathroom spoiled her day and her evening performance, would have been charmed by the beauty of this typical Crane room. Even the most frugal will be delighted by the economy with which this beauty is here offered to American home builders. The *Corwith* bath with overhead shower, the *Norwich* lavatory, the *Santon* closet, all new fixtures full of character, cost no more than old-fashioned clumsy ones. The delicate India ivory hue in the fixtures adds only a fraction to the complete cost of a bathroom. The decorations . . . linoleum for the floor, canvased wainscot, papered walls . . . actually can be had for less than a stereotyped room. For a book of twelve such beautiful rooms, one of which may exactly fit your taste, purse, and house, write for the book, *Bathrooms for Out-of-the-Ordinary Homes.* Your architect and plumbing contractor will help you plan and make the installation.

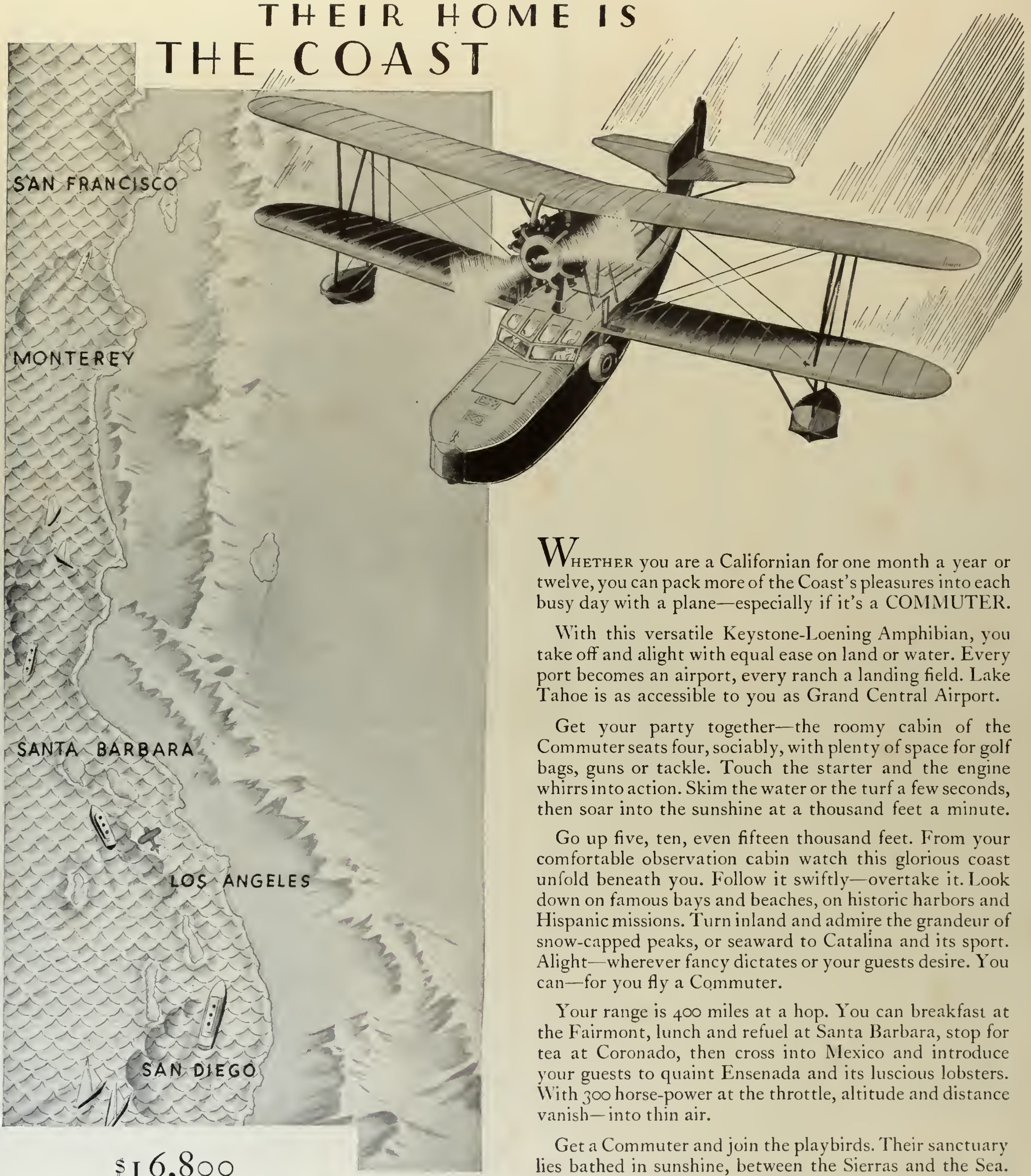
Valves CRANE *Fittings*

FIXTURES, VALVES, FITTINGS, AND PIPING, FOR DOMESTIC AND INDUSTRIAL USE

Crane Co., General Offices: 836 S. Michigan Ave., Chicago • 23 W. 44th St., New York • Branches and sales offices in one hundred and ninety cities

211024
SEP 13
MAR 3

PLAYBIRDS OF PARADISE THEIR HOME IS THE COAST



WHETHER you are a Californian for one month a year or twelve, you can pack more of the Coast's pleasures into each busy day with a plane—especially if it's a COMMUTER.

With this versatile Keystone-Loening Amphibian, you take off and alight with equal ease on land or water. Every port becomes an airport, every ranch a landing field. Lake Tahoe is as accessible to you as Grand Central Airport.

Get your party together—the roomy cabin of the Commuter seats four, sociably, with plenty of space for golf bags, guns or tackle. Touch the starter and the engine whirrs into action. Skim the water or the turf a few seconds, then soar into the sunshine at a thousand feet a minute.

Go up five, ten, even fifteen thousand feet. From your comfortable observation cabin watch this glorious coast unfold beneath you. Follow it swiftly—overtake it. Look down on famous bays and beaches, on historic harbors and Hispanic missions. Turn inland and admire the grandeur of snow-capped peaks, or seaward to Catalina and its sport. Alight—wherever fancy dictates or your guests desire. You can—for you fly a Commuter.

Your range is 400 miles at a hop. You can breakfast at the Fairmont, lunch and refuel at Santa Barbara, stop for tea at Coronado, then cross into Mexico and introduce your guests to quaint Ensenada and its luscious lobsters. With 300 horse-power at the throttle, altitude and distance vanish—into thin air.

Get a Commuter and join the playbirds. Their sanctuary lies bathed in sunshine, between the Sierras and the Sea.

$16,800

KEYSTONE-LOENING AMPHIBIAN COMMUTER

U. S. DEPARTMENT OF COMMERCE APPROVED TYPE CERTIFICATE NO. 219

KEYSTONE AIRCRAFT CORPORATION
Division of CURTISS-WRIGHT CORPORATION
Sales Offices: 27 West 57th Street, New York

A little stream in mid-Canada—a stream of quiet beginning—divides and finds its way to both the Atlantic and the Pacific. Another stream, this time of creative thought in the brain of man, flowed forth to end in that colossus of commerce—the automobile industry. So with the airplane. So with radio. And so will it be with the next miracle of modern civilization

. . the world's ship comes in on a constant stream of ideas . .

Ideas rule. Ideas are wealth—power—progress. Ideas are all we are, and all we hope to be. Men who head great business institutions . . . men who toil in experimental laboratories . . . men who direct far-flung sales organizations . . . all recognize and respect this truth. These men, who give such intensive thought to their own projects, have a right to demand comparable creative power when they call upon the aid of advertising. Here, too, ideas rule. Without them advertising has little value. With them, it exerts almost limitless influence. Advertising, well conceived and well directed, is a stream which carries the fame of a product and its maker from the Atlantic to the Pacific . . . and thence across the world.

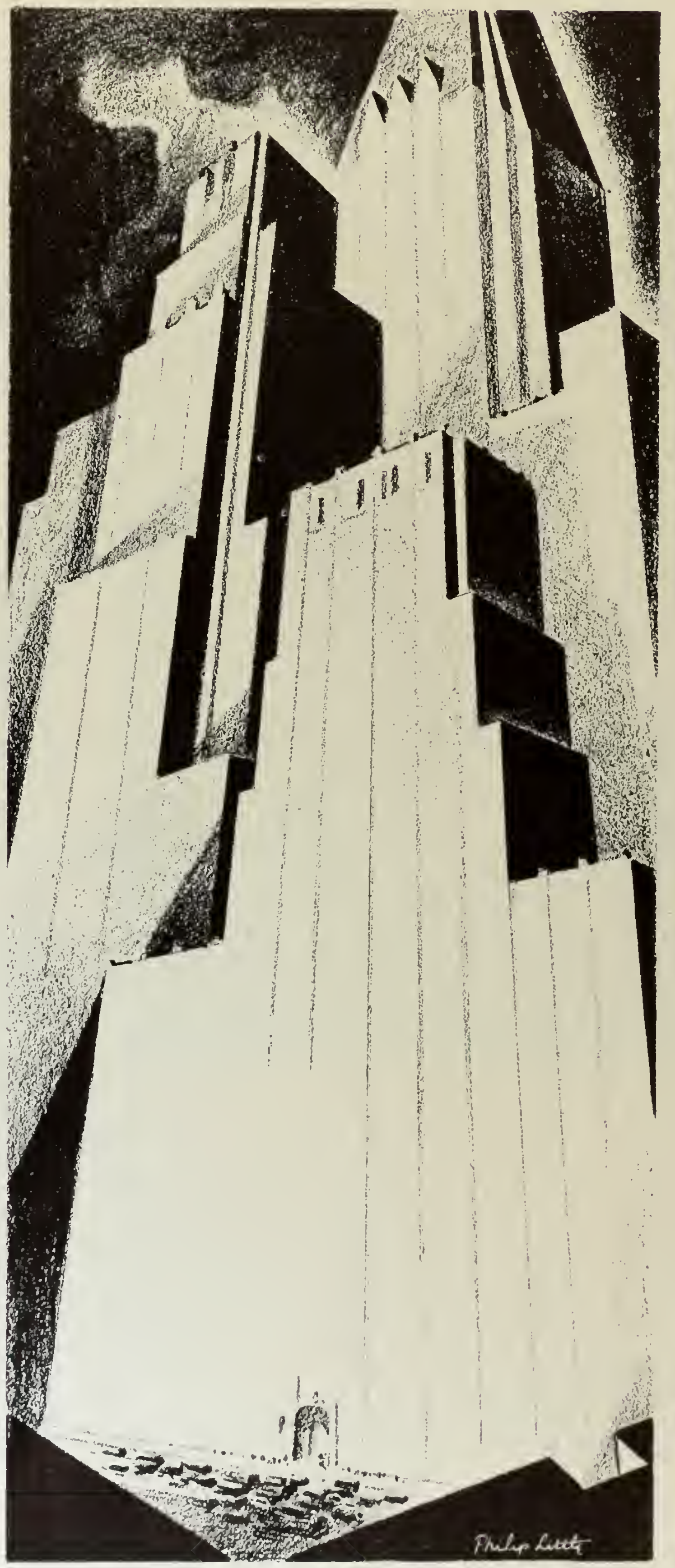
CAMPBELL-EWALD COMPANY

advertising well directed H. T. Ewald, President . . Offices in Detroit, New York, Chicago, Seattle, Los Angeles, Portland, San Francisco, Paris, France; Sydney, Australia; In Canada — Campbell-Ewald Limited, Toronto; Montreal.

FORTUNE is published monthly by TIME FORTUNE Corp., at 205 E. 42nd St., New York, N. Y. Application for entry as second-class matter is pending. Subscription rates: One year in the U. S. and possessions, $10; Canada, $10.50; elsewhere, $11.

WESTWARD

AGAINST THE PROPHETIC SKY



SAN FRANCISCO IS RISING TO A NEW, HIGH PLACE IN THE SUN...

Today more than ever San Francisco is a name that is fraught with promise. Out of a spirited, pioneer past there has come a present whose force is dynamic.

First city when the West was a fledgling, San Francisco has come to be headquarters for one of America's strongest sectors... but even tonight, today will join the past... and the city is thinking of what is to be.

From this city's seven hills, California stretches north and south and east to embrace the most concentrated population in the West. Within a radius of one hundred and fifty miles live half the people of California, while 1,600,000 people of more than average per capita wealth live within a radius of an hour's ride. And 11,000,000 people who live west of the Rocky Mountains can be served more quickly and cheaply from San Francisco than from any other city.

But there is another, greater market that fascinates these modern minds! 900,000,000 people in the lands bordering the Pacific are awakening to the wonder of the world's progression... demanding more and more of the things it has to give. And San Francisco is the natural gateway for the commerce that is going to modernize these millions.

The great deep-water bay, already second in the United States in the value of water-borne tonnage, is but one of the natural advantages San Francisco is counting on. An even, workable climate that speeds production throughout the year, is another. Center of a region rich in natural resources (one of which is economical *natural gas*) and served by three great transcontinental railroads, the city and the area about the Bay need never know a western manufacturing equal. Finally, this far-seeing city is headquarters for the leading financial, railroad, lumber, hydro-electric and distributing as well as manufacturing and shipping interests of the Pacific Coast... right now...

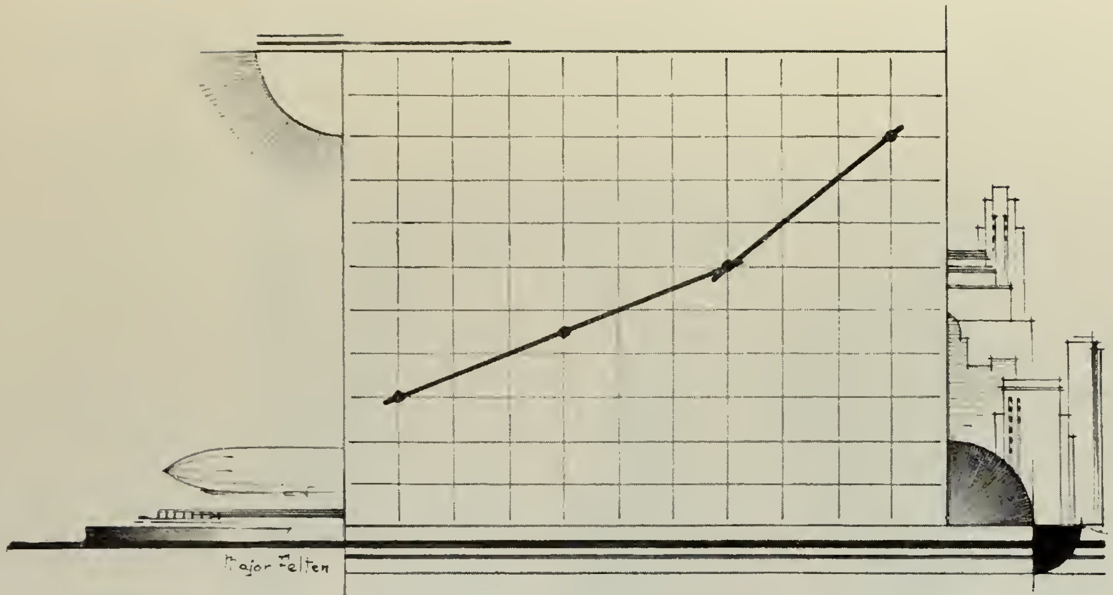
To the world-sung natural advantages this city owns—to these things that opportunity is built upon — San Francisco adds the splendid life that has made thousands who came first to visit return again to live.

Men of destiny are marking San Francisco's future *undeniable* ... seeking ways and means to link it with their own.

Californians Inc., Dept. 2202, 703 Market Street, San Francisco, are anxious to tell you more about this city. Write today. You will receive a prompt, worth-while reply.

SAN FRANCISCO

IN CALIFORNIA—"WHERE LIFE IS BETTER"



Over the past ten years our growth in advertising volume has been like that...tripling in the period...We think this means...

the application of sound principles to advertising, a personnel that knows how to apply these principles, a form of organization that is basically sound, and client satisfaction with the results. Over a long period, agency growth is a pretty good indication of dependability and service.

THE H. K. McCann COMPANY
ADVERTISING

NEW YORK · CHICAGO · CLEVELAND · SAN FRANCISCO · LOS ANGELES · SEATTLE · DENVER
MONTREAL · TORONTO · LONDON · PARIS · FRANKFORT, o. M.

Are these TALLEST OFFICE BUILDINGS *already obsolete?*

They are—unless they have Manufactured Weather

Theatres have proved beyond question that people choose to go where air is conditioned for maximum comfort and health the year round.

Great department stores have found that people neglect other shops for those where their comfort is assured by Manufactured Weather.

Today tenants are enjoying this modern comfort in numerous offices.

THE newest great office building faces almost immediate obsolescence unless it has Manufactured Weather—just as the old building which was torn down to make way for it became obsolete the moment it lacked something that the tenants demanded. The office building which makes its own weather—which is cooled in summer and heated in winter with properly conditioned air—makes every other building not so modernized a thing of the past . . . a cheaper choice . . . a home for second-class business.

Manufactured Weather has proved its worth. It is not a luxury; it is a necessity—as fundamental a necessity as proper lighting, adequate elevator service.

Congress has it—the Nation's Representatives meet in the Capitol Halls, where, winter and summer, the air is warmed or cooled, humidified or de-humidified as the season demands, and it is always fresh, and literally washed clean.

Macy's has it, a dozen other famous department stores have it—they attract and hold shoppers by the thousands because of their relief and contentment in the fresh, pleasant Manufactured Weather of the store—independent of outdoor heat or cold or noise or dust.

Hundreds of factories have it—they use windows only for light. Sheer manufacturing economy has dictated that indoor air conditions must be constant and controllable.

Can we call that office building "modern" which has window poles in the corners, dust cloths in desk drawers, nerve-racking street noises in the ears of the workers—drafty spots near windows for executives and stuffy inner spaces for clerks?

Certainly not—for Manufactured Weather has banished these antiquated devices and conditions. The modern 1930 hotel or office building can no more countenance old-fashioned windows or fan ventilators than it could do without elevators.

Prove to yourself that this is true. Visit a theatre, a store, a factory or a building where it is already in operation—and answer for yourself.

Until you have done this, any estimate—any conception—you may have will fall short of the healthful comfort, the serenity, and the cleanliness that Manufactured Weather has to offer.

There is only one Manufactured Weather. It is the product of Willis H. Carrier and his associates.

Carrier Engineering Corporation

NEWARK, NEW JERSEY

OFFICES: NEW YORK . PHILADELPHIA . BOSTON . CHICAGO CLEVELAND . WASHINGTON . DETROIT
KANSAS CITY . DALLAS . LOS ANGELES

CARRIER ENGINEERING COMPANY, LTD.
LONDON, PARIS, BOMBAY, CALCUTTA
JOHANNESBURG

CARRIER LUFTTECHNISCHE GESELLSCHAFT
STUTTGART, BERLIN

Manufactured Weather *makes* "Every day a *good* day"

The Alexander Hamilton Institute

ANNOUNCES

A New Course and Service for men who want to be independent in the next five years

Modern Business

THE next five years in American business will offer more opportunity *and more danger* than any similar period for a long time.

More men will achieve independence. More men who might achieve it will fail because of a failure to properly analyze the facts.

A right program will be more profitable than it has ever been. A wrong decision will be far more costly.

To put it in other words, the organization of business, the tempo of business, the speed of business are all in process of rapid change. The evidence is everywhere. In a brief period of thirty days between October 15th and November 15th, 1929, thousands of men who supposed that they were secure for life found themselves suddenly ruined. Thousands had their confidence so shaken that they are dazed and wondering. They have no plan. "What will happen to business in the next few years?" they are asking. "What program should we lay out for ourselves?"

The Institute foresaw the trend

Two years ago the Alexander Hamilton Institute, from its nation-wide contact with business leaders, sensed the tremendous changes which were about to come, and began to make preparations to meet them.

The Institute's original Course and Service in business was a great Course and did a great work. More than 398,000 men made it a part of their business equipment, and are far ahead because they did.

But the Institute saw that revolutionary changes were in prospect. Little business units were being merged into big units. Industries were reaching out into foreign markets. *Security prices were about to become subject to a whole new set of conditions.* Production methods were being revolutionized. The sales organization and strategy of the past were entirely unfitted for the new competition. The responsibilities of guiding the new business could not be discharged by men whose training had been in the old.

The Institute said: "We must prepare a wholly new Course to meet the new conditions. We must add authorities whose business success belongs to the present, and not to the past. They must be the biggest and most successful men of the present—the men who will be the leaders during the coming five years.

Without regard to cost, the Institute went out to enlist the co-operation of the nation's business leaders. The response was even beyond its most sanguine expectations. In effect, one and all these men said:

"The greatest need of all is for trained leadership. Count on us. Any contribution we can make to this New Executive Training will be a contribution to our own best interests, because it will furnish us with more of the sort of executives we need."

It is impossible in this page to give detailed facts about the New Course and Service. It is new from start to finish—so new that the latter part will not be entirely off the presses for some months. Every unit will come to you fresh and live and breathing—straight from the very inner sanctums of this new business world.

We invite you to send for the full facts in a new book entitled: "What an Executive Should Know." It is a volume that should be read by every man who expects to win a secure place for himself in the next five years. It is well worth an hour of your time. And it is free.

Send for your copy today. You cannot gain a proper perspective on what lies ahead unless you look at the picture through the eyes of the country's biggest men.

Alexander Hamilton Institute, 992 Astor Place, New York City. (In Canada address Alexander Hamilton Institute, Ltd., C. P. R. Building, Toronto)

Please send me "What an Executive Should Know," which describes the new Modern Business Course and Service.

Name________________________________

Business Address____________________ Business Position____________

1880 GOLDEN ANNIVERSARY YEAR 1930

DAVEY TREE SURGERY

Reproduction from a painting made on the estate of Adolph S. Ochs, Lake George, New York, by Frank Swift Chase

© The D. T. E. Co., Inc., 1930

3¼ million dollar Davey tree-saving business in 1929

NOTWITHSTANDING this large volume of business, 75.5% of clients pay less than $100.00 each for the service of internationally famous Davey Tree Surgeons. You might wonder why it is possible to secure this reliable, expert service at so low an average cost.

In the first place, Davey men are really local to you. They are thoroughly trained in Ohio and are then sent out to live in the many localities where Davey clients are served. They are easily available for large or small operations.

JOHN DAVEY
1846-1923
Father of Tree Surgery
Reg. U. S. Pat. Office

In the second place, nearly all Davey men are motor equipped and can go quickly from one operation to another in the sections where they live. The element of lost time is negligible.

In the next place, Davey Tree Surgeons know what to do. They do not waste any time in guessing or in experimenting. Not only are they real experts in actual performance, but they are specially trained in the all-important matter of diagnosis.

And last, but by no means least, Davey men are workers. No one is permitted to remain in the Davey organization unless he works diligently and honestly. You can trust Davey Tree Surgeons.

Send for nearest Davey representative to make a careful examination of your priceless trees without obligation. Write or wire Kent, Ohio, or telephone nearest branch office.

Tune In Davey Tree Golden Anniversary Radio Hour

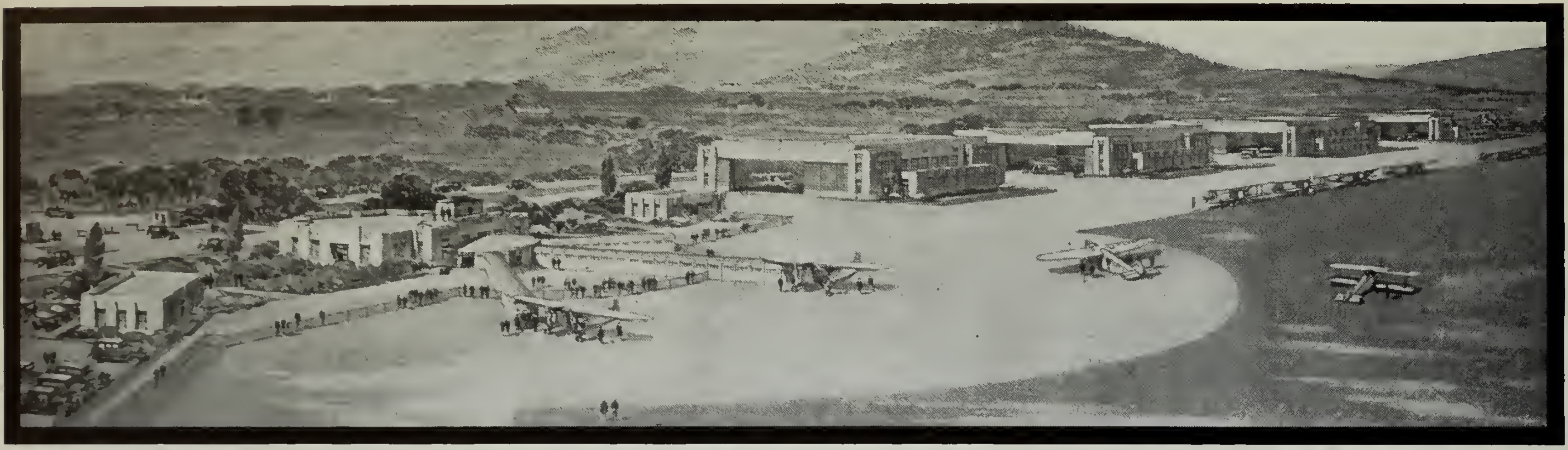
Every Sunday afternoon, 5 to 6 Eastern time; 4 to 5 Central time; over the Red Network National Broadcasting Company. Featuring the old-time songs that everyone knows and loves. Listen to Chandler Goldthwaite on the Skinner Organ.

THE DAVEY TREE EXPERT CO., Inc., 400 City Bank Bldg., Kent, Ohio
MARTIN L. DAVEY, *President and General Manager*

Branch offices with telephone connections: Boston, Springfield, Pittsfield, Providence, Hartford, Stamford, New York City, White Plains, Patchogue, L. I., Hempstead, L. I., Albany, Syracuse, Rochester, Buffalo, Toronto, Montreal, Orange, N. J., Ridgewood, N. J., Philadelphia, Addingham, Pa., Germantown, Pa., Baltimore, Washington, Pittsburgh, Cleveland, Toledo, Columbus, Dayton, Cincinnati, Indianapolis, Louisville, Detroit, Grand Rapids, Chicago, Oconomowoc, Wis., Minneapolis, Des Moines, St. Louis, Kansas City, Mo., Tulsa, Okla., New Orleans, Memphis, Nashville, Atlanta, Charlotte, N. C.

All Aviation is invited to use the Curtiss-Wright Airports

A nation-wide chain to provide facilities for the entire industry



Pittsburgh is the gateway between East and West air traffic. Bettis Airport is strategically located 20 minutes from the post office on the Pittsburgh-McKeesport highway.

This modern hangar at Curtiss Chicago port offers every facility for accommodation, service and repairs.

THIS first nation-wide system of major airports in the United States is unified under Curtiss-Wright Airports Corporation ownership and management.

Each port is strategically located to business centers—and on the main highways of both present and future air travel.

Preferred space is for lease today on exceptional terms to transport companies, aerial photographers, railroads who will engage in air transportation, manufacturers of planes, of engines, supplies, accessories, fuel companies, and to all commercial operators and private plane owners. Only student instruction and local passenger carrying are reserved exclusively for the Curtiss-Wright Flying Service on these ports.

Among the leading aviation interests who have *already* leased space on Curtiss-Wright ports are: American Eagle Co., American Moth Distributors, Clifford Ball Airlines, Continental Air Express, Hodgkinson Aircraft Co., Irving Air Chute Co., Inc., Kinner Airplane Motor Co., Maddux Air Lines, Nevada Air Lines, Pennsylvania Air Lines, Pickwick Airways, Inc., Rio Grande Oil Co., Transcontinental Air Transport, Inc., Union Oil Co., Vortex Wing Corporation.

To executives of any type of business interested in or connected with the aviation industry, we will be glad to send detailed and complete information concerning our present airport developments and future plans.

Kindly address your inquiry to Curtiss-Wright Airports Corporation, 29 West 57th Street, New York City.

Elevated promenades afford aviation enthusiasts at Chicago unique facilities to view all activities.

CURTISS-WRIGHT AIRPORTS

IN NEW YORK AREA: VALLEY STREAM, L. I. • CALDWELL, N. J. • NORTH BEACH, N. Y. C. • HADLEY FIELD, N. J. • LOS ANGELES, CAL. • IN SAN FRANCISCO AREA: ALAMEDA, SAN MATEO • HOUSTON, TEX. • MILWAUKEE, WIS. • CHICAGO, ILL. • ST. LOUIS, MO. • CLEVELAND, O. • PITTSBURGH, PA. • LOUISVILLE, KY. • BALTIMORE, MD.

THE
CROIX DE GUERRE
FOR
AMERICAN
ACHIEVEMENT
PRESENTATION
CEREMONY

Among those who have been presented with the CROIX DE GUERRE for AMERICAN ACHIEVEMENT

GEN. LINCOLN C. ANDREWS
ADMIRAL W. S. BENSON
MR. HERBERT V. BOOK
MR. E. G. BURKAM
HON. OSCAR E. CARLSTROM
HON. C. M. CHAMBERS
HON. JAMES M. COX
HON. JOHN W. DAVIS
HON. RICHARD P. ERNST
HON. W. J. FIELDS
MR. CLAUDE H. FOSTER
MR. J. B. GRAHAM
JUSTICE SAMUEL J. HARRIS
HON. W. B. HARRISON
MR. EDGAR WATSON HOWE
COL. CHAS. A. LINDBERGH
JUDGE J. WILLIS MARTIN
HON. JOSEPH W. MARTIN, JR.
MR. GRAHAM McNAMEE
MR. C. W. NASH
GENERAL JOHN J. PERSHING
MR. FRANK A. SEIBERLING
MR. CHAS. FULLER STODDARD
HON. W. A. WALSH
MR. JOHN B. WILLIAMS

Here is the first *definite answer* to a problem every business has to face

PROMOTION, of course, is the best means for a business to reward men of unusual merit. But promotion is not possible in every case.

What, then, will supply incentive for greater loyalty and achievement on the part of employes?

There have been many attempts to answer this question. Every year thousands of awards are made—loving cups, traveling equipment, cash bonuses, organization insignia, all prizes without meaning.

All these are proof that every large business needs a definite system of awards!

PRECISION
Trade Mark Reg
Every Pentagon carries this GRUEN pledge mark, placed only upon watches of finer quality, accuracy and finish. Made only in the Precision workshop

For the first time, such a plan has been worked out.

This plan is based upon a single award, already presented to so many distinguished men that it has won the title of "The Croix de Guerre for American Achievement."

A great deal of publicity has been attached to the various presentations of "The Croix de Guerre for American Achievement," chiefly because of the type of men who have received it, as indicated by the list above.

The number of people who recognize it *as an award for merit* is therefore already considerable and is rapidly increasing. It is this one fact which makes "The Croix de Guerre for American Achievement" the perfect foundation for your own plan of awards.

"The Croix de Guerre for American Achievement" is the Gruen Pentagon Watch. How it has won its present standing in the public esteem is perhaps explained by the qualities of the watch itself.

It is first of all unique. Its patented shape identifies it immediately wherever it is seen. It is known as a watch of unusually high quality, and because its shape is so distinctive and so rigidly protected against imitation, it cannot be confused with any other timepiece.

The book shown in the illustration above is a complete outline of the award plan based upon "The Croix de Guerre for American Achievement."

The coupon at the right, with your name and address, will bring it to you by return mail.

You may wish, also, to see "The Croix de Guerre for American Achievement." New Classified Telephone Directories being issued will list under "Gruen Guild Watches" the Gruen jeweler nearest you. He has a variety of Gruen Pentagon models to show you, ranging in price from $75 to $2500—including the Paladin model at $250.

GRUEN WATCH MAKERS GUILD
TIME HILL, CINCINNATI, U. S. A.
Branches in various parts of the world
Engaged in the art of making fine watches for more than half a century

As new Classified Telephone Directories are issued, you will find under "Gruen Guild Watches" the name of your nearest Gruen jeweler. His store is marked by this Gruen Service emblem

GRUEN WATCH MAKERS GUILD
TIME HILL, CINCINNATI, U. S. A.
Please send me a copy of your Presentation book for "The Croix de Guerre for American Achievement."
Name . . . .
Title . . . .
Firm name . . . .
Address . . . .

NOW . . . Tell Your Sales Story in 16 mm. Sound Movies with the New Portable **Project-O-Phone**—*"Vocalizes as it Visualizes"*

HERALDED months ago as a future "possibility," 16 mm. synchronized sound movies for business use are here...and here to stay, with the amazing new portable Project-O-Phone.

Utilizing a highly perfected recording disc system coupled to the Filmo Business Projector, the Project-O-Phone successfully presents your complete sales story in synchronized sound movies. Executives may now appear "in person" before their ultimate consumers or the largest of dealer or distributor organizations — without leaving their offices, yet giving their messages the vital force of their own voice and personalities.

And this is only the beginning! Better than a trip through your factory or sales school are 16 mm. synchronized sound movies with Project-O-Phone; for you can carry your product, your factory or your school to the prospect, user or dealer, at an enormous saving in cost and at a tremendous gain in the effectiveness of the story. For conventions, exhibits, sales meetings, and in sales training schools, Project-O-Phone is today's answer to today's need for more effective selling methods.

Practical . . . Positive . . . Portable

The Project-O-Phone's basic principle is the synchronization of two separate motors, one for the reproducing turntable and one for the projector, by positive mechanical coupling. It is this highly perfected control which permits exact and constant synchronization of sound and picture.

The sound is reproduced electrically through an ordinary radio audio system and a dynamic loud speaker. Any radio shop can service these elements if service should ever be needed. And should the precise, trouble-free and simple Filmo Business Projector, which composes the projection part of the Project-O-Phone, require any attention, Bell & Howell dealers are located everywhere.

Thoroughly proved as a mechanical and electrical unit, Project-O-Phone is further practical because of its portability. Three cases only are required for transportation, each easy to carry and all three easily stowed away in half of the back seat of an auto.

There is a film producing and recording laboratory near you equipped to put your sales message or visual-sound demonstration into synchronized sound movies for Project-O-Phone. Or your present 35 or 16 mm. film may be given a sound counterpart just as easily. Write to us and we will send you the name of the Filmo dealer and cooperating laboratory nearest you, also further information regarding the new Portable Project-O-Phone.

BELL & HOWELL
Filmo

BELL & HOWELL CO., Dept. N, 1818 Larchmont Ave., Chicago, Ill. New York, Hollywood, London (B&H Co., Ltd.) Established 1907

UNITED FORTUNES

The fundamental principle of chain-hotel operation is expressed in the familiar sentiment, "One for all and all for one." Or, to put it in a single word—Cooperation. The same sound business methods which have proved effectual in other industrial fields—such as steel, automobiles, stores—govern with equal efficacy the operation of the modern hotel system. Centralized control and supervision—volume purchase of supplies—systemized forms for auditing and accounting—opportunities afforded for comparative checking of operating costs—these are a few of the more obvious advantages enjoyed by the chain hotel over the unattached hotel.

We cannot, of course, standardize in good manners, in courtesy and in all the other impalpable, though indispensable, elements which are represented in the term "Service." Such factors are very largely individual. But we *can* select our individuals, we *can* inspire them and lay down for their guidance a code of practice, such as is represented in our series of United Manuals. We can also, by reason of our size and diversity of operation, offer to deserving employees opportunities for advancement which no single hotel can possibly present.

Our own progress is governed solely by the measure of our success in translating these principles and practices into terms of service for the benefit of the public.

Frank A. Dudley, *Pres.*

THE WORLD'S LARGEST HOTEL SYSTEM

New York City	The Roosevelt
Philadelphia, Pa.	The Benjamin Franklin
Seattle, Wash.	The Olympic
Worcester, Mass.	The Bancroft
Newark, N. J.	The Robert Treat
Paterson, N. J.	The Alexander Hamilton
Trenton, N. J.	The Stacy-Trent
Harrisburg, Pa.	The Penn-Harris
Albany, N. Y.	The Ten Eyck
Syracuse, N. Y.	The Onondaga
Rochester, N. Y.	The Seneca
Niagara Falls, N.Y.	The Niagara

Erie, Pa.	The Lawrence
Akron, Ohio	The Portage
Flint, Mich.	The Durant
Kansas City, Mo.	The President
Tucson, Arizona	El Conquistador

(Nov. to April inclusive)

Montreal, Canada	The Mount Royal
Toronto, Canada	King Edward Hotel
Hamilton, Canada	Royal Connaught
Niagara Falls, Canada	The Clifton*
Windsor, Canada	The Prince Edward

*May to December inclusive

AFFILIATED

(United Hotels of the South and West, Inc.)

San Francisco, Cal.	Hotel St. Francis
Shreveport, La.	The Washington-Youree
New Orleans, La.	The Roosevelt
New Orleans, La.	The Bienville

(Canada-West Indies Hotel Company)

Kingston, Jamaica, BWI	The Constant Spring

Opening season 1930-31

Also

AMERICAN HOTELS CORPORATION

ABROAD: Leading hotels in all cities and resorts, including U. N. I. T. I. System and Japan Hotel Association. Tourist representative, C. C. Drake & Company, London, Paris, Berlin.

UNITED HOTELS COMPANY OF AMERICA

EXECUTIVE OFFICES, 25 WEST 45th STREET, NEW YORK CITY

The
BLACKSTONE
South Michigan Avenue
and the Lake Front
CHICAGO

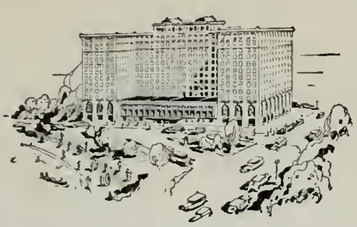
HOTELS *of* Distinction

These world-famous hotels have been individualized by impressive ideals of service, quiet dignity and a lasting congenial atmosphere.

Residential suites for long term leases available at special discounts.

Particular attention given to Banquets, Balls, and other Social Functions. Unusual facilities for Conventions at The Drake.

Write or consult C. C. Drake Company for steamship tickets, tours. Every facility for travelers. Offices in above hotels, and in The Roosevelt, New York, The Benjamin Franklin, Philadelphia, The Willard, Washington, The St. Francis, San Francisco.



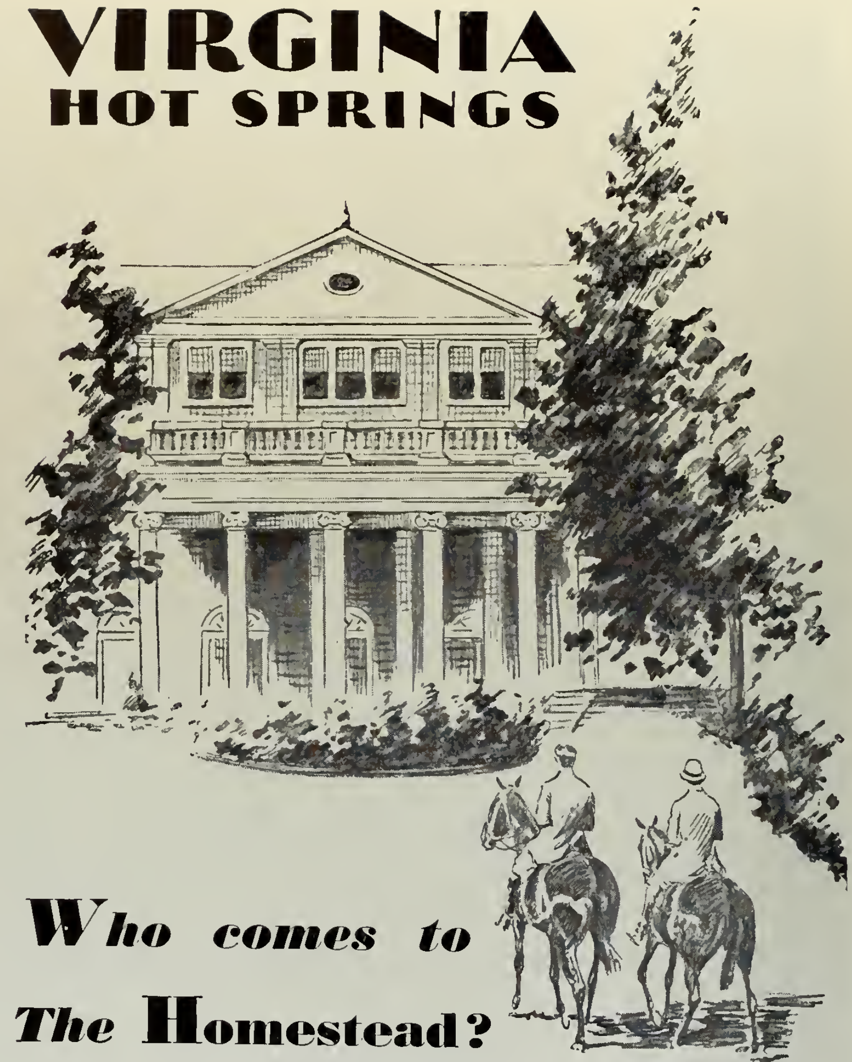
The **DRAKE**
HOTEL *Chicago*
Lake Shore Drive at Michigan Avenue

The GLEN SPRINGS

the only resort in America where the famous Nauheim treatments for the heart are given with a natural calcium chloride brine—as at Bad Nauheim itself. *Address* Mr. Wm. M. Leffingwell, President, The Glen Springs, Watkins Glen, N.Y.

THE AMERICAN NAUHEIM

VIRGINIA
HOT SPRINGS



Who comes to The Homestead?

The life here is many-sided. In the social columns one sees throughout the year the names of prominent persons who choose The Homestead for their holidays.

These and other guests come to The Homestead not only because it is one of the country's foremost hotels, but also because here they find unequalled opportunity for sports. Three golf courses, many excellent tennis courts, 200 fine saddle horses, bathing, and numerous scenic trails for mountain climbers and hikers, are among the popular diversions available. And, of course, dancing, concerts and clever entertainments.

And many persons come here for the benefits of the baths and treatments which are made possible by our location at the renowned Virginia Hot Springs. Not a sanitarium, The Homestead nevertheless gives its guests every advantage of the efficacious spring water, in the form of special treatments and hot baths, to which may be added our own treatments of massage and electricity. If desired, our staff of capable physicians will examine, diagnose or prescribe. The environment is ideal for what is known as a "rest cure."

Thus The Homestead offers every expected comfort and luxury of one of the world's very finest resort hotels, plus unusually complete sport facilities, and the unique benefits of the Hot Springs for those who require them. The climate is delightful the year round. A very interesting booklet will be forwarded you upon request. Kindly address Christian S. Andersen, Resident Manager.

Reservations and transportation from New York may be secured from the Virginia Hot Springs office in the Ritz-Carlton.

The **HOMESTEAD**
Hot Springs Virginia

Summer Temperature Averages 66°

Introducing

the Moderate Rate

Into Modern Hotel Luxury

APPRECIATION is complete when you learn the extremely moderate rates at the Hotel Lexington. The luxury of its appointments, the perfection of its French cuisine, the convenience of its location leave nothing else to be desired.

Maitre Dave Bernie and his Lexington Minute Men Play at both Dinner and Supper. No Couvert at Dinner

801 ROOMS. Each with private bath (tub and shower), circulating ice water, mirror door.

341 with double beds. 1 person $4, two ----$5
229 with twin beds. Either 1 or 2 persons ----$6
231 with twin beds. Either 1 or 2 persons ----$7

HOTEL
LEXINGTON

Lexington Ave. at 48th St. New York City
Frank Gregson, Mgr. Phone MURray Hill 7401
Direction of American Hotels Corporation J. Leslie Kincaid, President

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WASHINGTON'S FINEST HOTEL

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Land of Romance— Charm and Mystery

. . . Mellow summer days, long hours of bright sunshine, rosy twilight, where the sun sets in a blaze of glory to rise slowly again, blending evening into morning with no thought of night. Range after range of giant snow-capped mountains. Gleaming glaciers. All these—and the comfort and luxury of steamers of the augmented Canadian National Railways Pacific Coast Alaska Fleet.

Canadian National's Jasper Park-Pacific Route across Canada prefaces this glorious voyage through the sheltered "Inside Passage," with stops at Ketchikan, past wondrous Taku Glacier, Wrangell, Juneau and Skagway—one of the world's famous rail-and-water cruises.

A tri-weekly service from Vancouver or Prince Rupert affords excellent connections at Skagway for Lake Atlin and Dawson by the White Pass and Yukon Railway, following the famous Klondike Trail of '98—a succession of thrills and a constant panorama of magnificent scenery.

For descriptive literature communicate with our nearest office.

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The Largest Railway System in America

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WASHINGTON, D. C
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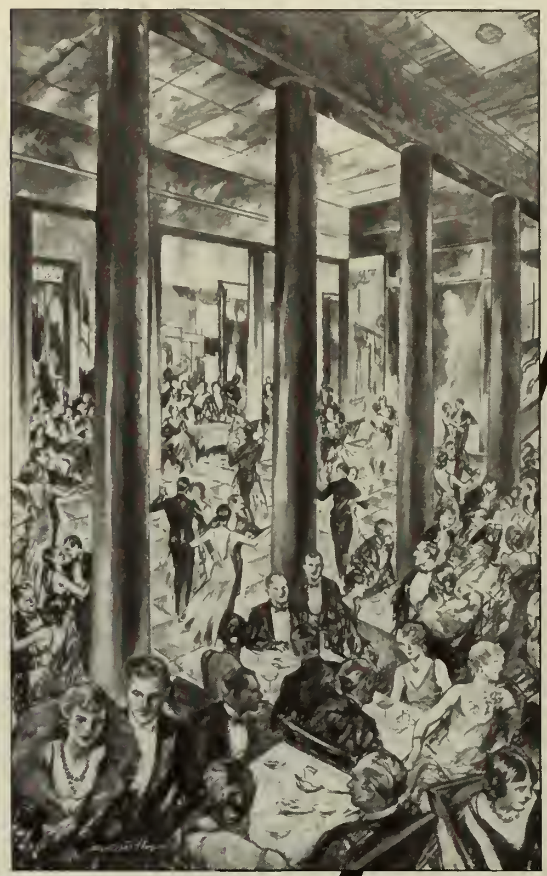
PARIS...

The splendor of the Louis' in its magnificent salons



New Salon Mixte with illuminated glass dancing floor of the "Paris"

S. S. "Paris"
Feb. 21-Mar. 21

"Ile de France"
Feb. 7-Mar. 7

S. S. "France"
Mediterranean-Morocco Cruise
February 12
Mar. 15-April 25

FROM the days of the Louis', France has given the world its standards of elegance and chic ... clothes, manners, menus, the *bon mot* and the art of fascination ... cross "the longest gangplank in the world" to the **New "Paris"**...[just re-engined for speed ... redecorated for smartness and modernity ... a crystal smoking room ... sun deck with sidewalk café ... practically all outside rooms with bath] ... and you're in Paris herself ... the same gracious service, the same brilliant backgrounds ... the same gayety, the same infinite finesse.

Five and a half days to Plymouth, England

Sail from the heart of Manhattan on one of the weekly express liners *"Ile de France"*, *"Paris,"* or *"France"*... direct to Plymouth, a waiting Pullman express for London, a few hours later the covered pier at Havre, three-hour express to Paris.

French Court Life

French Line

Information from any authorized French Line Agent or write to 19 State Street, New York City

548

The finest Steed is for the Guest
we offer the All-Pullman
North Coast Limited
first among the transcontinentals, in welcoming you to the Northwest—
the country pioneered, developed and served by the
Northern Pacific Railway

NORTHERN PACIFIC
YELLOWSTONE PARK LINE
Your Host in the Northwest

Banff

18-HOLE GOLF COURSE

▼

NEW $100,000 GOLF HOUSE

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SULPHUR SWIMMING POOL

▼

FRESH WATER SWIMMING POOL

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FOUR "EN TOUT CAS" TENNIS COURTS

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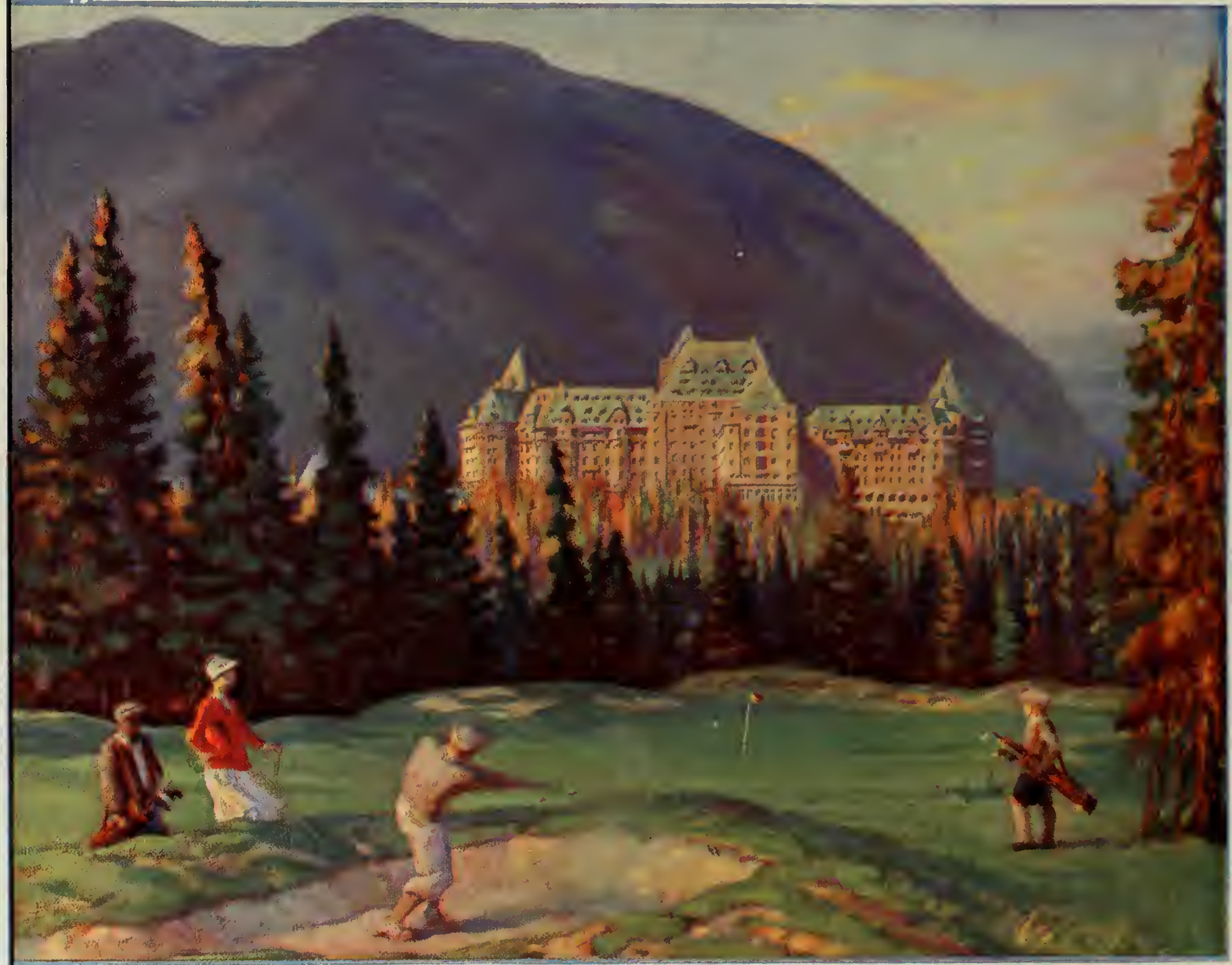
SADDLE HORSES

▼

MOUNTAIN PONIES

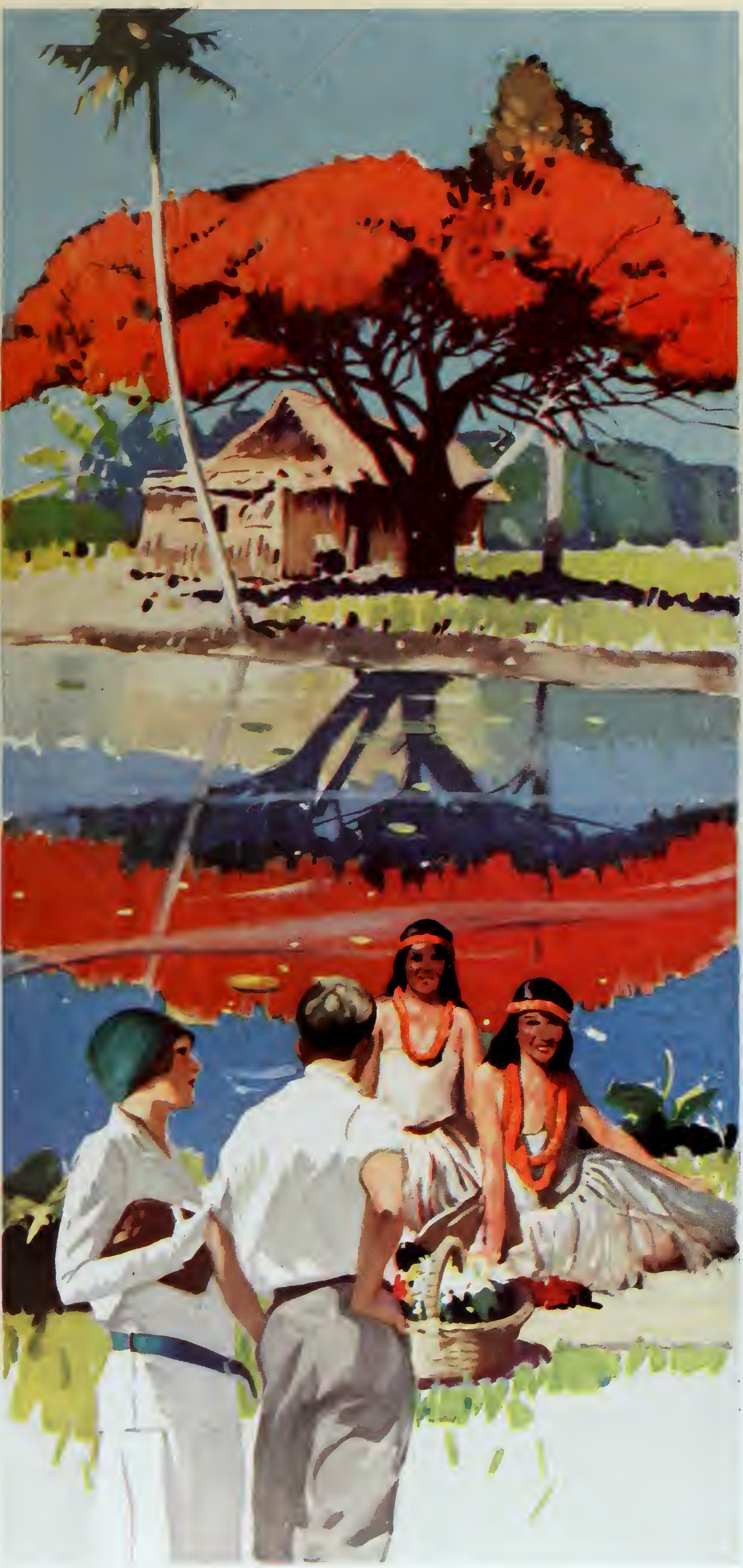


VIGOROUS OUT-OF-DOOR LIFE IN THIS GORGEOUS MOUNTAIN SETTING

Spend a week . . . or a month . . . or all summer at Banff in the Canadian Rockies. Play golf on the dramatic, new golf course . . . 18 holes, 6640 yards, first drive smack across the Spray River . . . bent-grass greens and well-turfed fairways . . . 19th hole a new $100,000 club-house overlooking Bow Falls. Swim in the magnificent pools . . . you may choose between the warm one fed from the sulphur springs, and the cold freshwater one. Play tennis on one of the four *en tout cas* courts. Canter smoothly along bridle paths in the spruces . . . or ramble up mountain trails on sure-footed trail-horses. Motor, fish, boat as you will . . . there are all sports at Banff. And at night, dance in the smart ball-room to the vivid rhythms of a good orchestra. Always something new to do, something new to see . . . and always the perfection of existence in the big, castle-like hotel, keyed to the tastes of world-travelled people in every detail of physical comfort and artistic charm.

Information from *Banff Springs Hotel, Banff, Alberta, Canada,* or any Canadian Pacific Office: New York, Chicago, Atlanta, Boston, Buffalo, Cincinnati, Cleveland, Dallas, Detroit, Indianapolis, Kansas City, Los Angeles, Memphis, Minneapolis, Omaha, Philadelphia, Pittsburgh, Portland, San Francisco, St. Louis, Seattle, Tacoma, Washington. In Canada: Montreal, Nelson, North Bay, Ottawa, Québec, Saint John, Toronto, Vancouver, Victoria, Winnipeg.

BANFF SPRINGS . . . . . A CANADIAN PACIFIC HOTEL



HAWAII « « Where Spring Comes In South Sea Glory

SPRING IN HAWAII! The loveliest Spring you have ever known! Enchantment enfolds you while the Paradise Isles are still faint tracings on a golden horizon. The wonder of a new world dawns as your liner cleaves the foam. Dazzling scapes of land and sea succeed each other to make the spell complete long before you glide by Waikiki and moving Hawaiian melodies drift out to you on fragrant winds to extend a hospitable land's "Aloha."

¶ Spring in Hawaii! A time when a burnished sky looks down on a world of glowing color. The pastel tints of dawn, the glorious shifting hues of Hawaiian sunset are reflected in myriad tropic gardens, splashed over gorgeous flame-trees tossing manes of fire in groves of new-washed green. The breath of ginger blossoms comes down from verdant mountain sides and mingles forest incense with the perfumes of countless oleanders.

¶ Spring in Hawaii! When May Day becomes Lei Day and a joyous people express their love and friendship with fragrant South Sea garlands ··· when honeymooners wander forest aisles or dream by coral beaches ··· when visitors from other climes marvel at the cool delight of a climate that retains its winter comforts and adds a million vernal glories.

¶ Spring in Hawaii! Make your plans to go this year. March is not too early. The vivid colors of Winter are merging with the golds and reds of Summer. Great liners glide over sun-smoothed seas in four to six days from the four gateways of the Pacific according to the ship selected. They defer to none in luxury or service. Sailings every few days offer every advantage of time and convenience. Write for detailed information.

~

¶ *You do not have to bother with passports or other formalities. Hawaii is an integral part of the United States—as much so as your own State.*

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San Francisco, Calif.
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535 Fifth Ave. - - - New York
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655x Chamber of Commerce Bldg.
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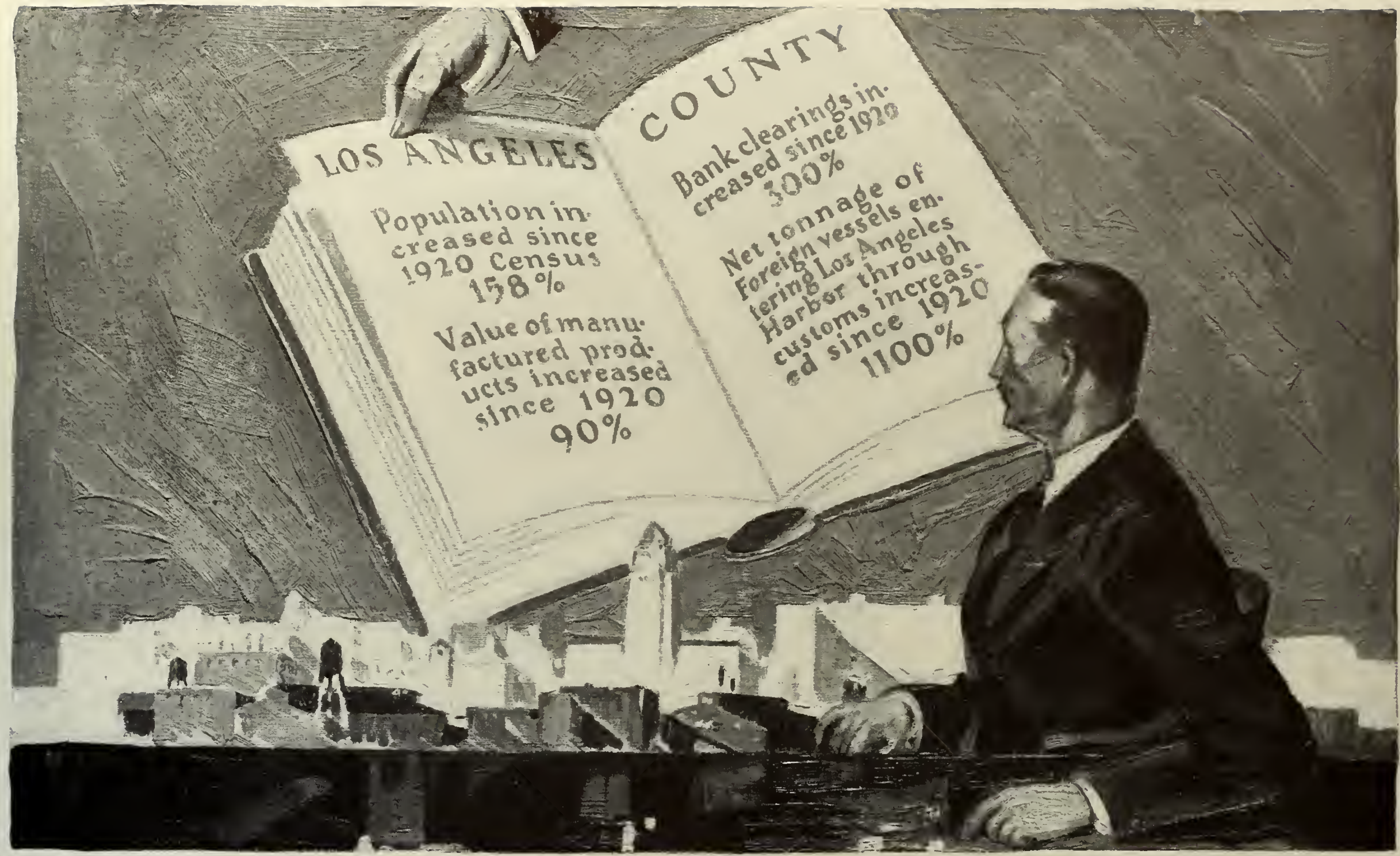
140 So. Dearborn - - - Chicago
685 Market St. - - San Francisco
609 Thomas Bldg. - Dallas, Texas
213 E. Broadway - San Diego, Cal.

Any travel agent will gladly give you full particulars and arrange your bookings


LOS ANGELES COUNTY
Population increased since 1920 Census 158%
Value of manufactured products increased since 1920 90%
Bank clearings increased since 1920 300%
Net tonnage of Foreign vessels entering Los Angeles Harbor through customs increased since 1920 1100%

A RECORD OF DEVELOPMENT UNSURPASSED IN HISTORY

The most efficient distribution center of the Pacific Coast and of the Far West.

* * * *

Industrial Power Rates with load factor discount, as low as ¾c per K.W. Hour.

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Natural Gas at 20c per million B.T.U's. Oil at 16⅛c per million B.T.U's.

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Abundant Open Shop Contented Labor

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Low Building Costs and maintenance and high labor efficiency due to mild climate.

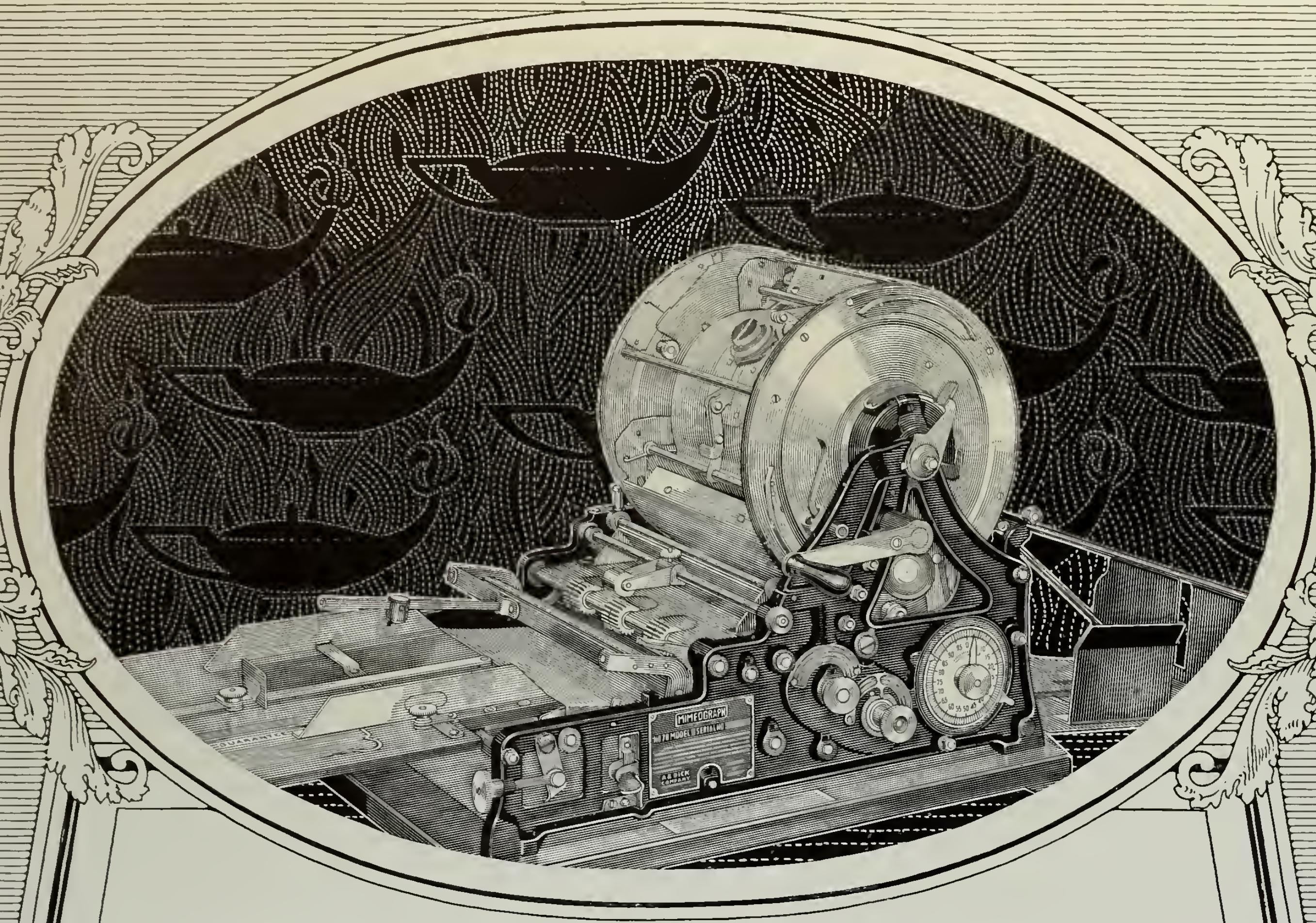
JUST so long as Southern California continues to enjoy its delightful year 'round equable climate, and other living advantages; and just so long as human nature remains as it always has been . . . people will continue to flock to Los Angeles County.

It is but necessary to study indices of the past to see that this area must inevitably become one of the greatest consumer markets of the world. Today, it is by far the largest *concentrated* market on the Pacific Coast. And it is substantially increasing its lead every year.

Industrialists who are entrusted with the destinies of great manufacturing plants and who must consider the economics of production, distribution and markets, are bound to realize the importance and the good business of locating plants in Los Angeles County to serve this great metropolitan area . . . and the whole Pacific Coast . . . and to develop the tremendous virgin export markets of the Far East.

Inquiries are invited regarding manufacturing and market advantages and opportunities in Los Angeles County. Address: INDUSTRIAL DEPT. LOS ANGELES CHAMBER OF COMMERCE.

Industrial LOS ANGELES COUNTY



NEW YEAR LIGHT

The new year means little or nothing if it does not bring new ideas. There are many business and educational institutions in America that are not getting needed help from the Mimeograph and thereby are neglecting the opportunity to make telling use of thousands of new ideas—for immediate profit. The unrivalled ability of this clever device to establish speedy communication, by the exact duplication of letters, forms, sketches, maps, diagrams, questionnaires, etc., enables it to reach out for new markets and strengthen organizations. Almost as quickly as an idea is conceived it can be typed on the stencil sheet and nicely duplicated in unlimited thousands. The Mimeograph needs no experience to handle. It assures privacy. It operates at a very low cost. It is an idea disseminator. Write today for full particulars, which are almost sure to bring you new ideas about your business, from A. B. Dick Company, Chicago, or from branch office in any principal city.

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Dissonances

"YE MEN of America, methinks ye are in many ways too materialistic."—St. Paul the Apostle, as paraphrased by Myron C. Taylor

"It is an operative fact that Philosophy has to accept the controlling role of technological industry in contemporary civilization." —John Dewey

"There is no country in the world so efficiently governed as the American Telephone & Telegraph Co." —Ernest Elmo Calkins

"One thing alone is absolutely certain of the future: that our Western societies will not long persist in their present state." —Bertrand Russell

"Success—'the bitch goddess, Success,' in William James' phrase—demands strange sacrifices from those who worship her." —Aldous Huxley

"Pericles decreed that every Athenian might own five slaves—you [any American] have at your command the equivalent of 1,000." —Julius Klein

"Business—the oldest of the arts and the newest of the professions." —A. Lawrence Lowell

"I am naturally in sympathy with any effort that emphasizes not merely the power but the beauty of business as we practice it." —Darwin P. Kingsley

"The history of business remains obscure because those who followed in the footsteps of Gibbon and Carlyle were prone to give more attention to the titled ruler of a little principality or the petty politician of Buncome County than to the great captain of industry who takes the whole world for his realm." —Charles A. and Mary Ritter Beard

"Big business has come as the result of irresistible economic forces . . . The social perils that it has brought in its train are becoming more apparent every day and they are bound to multiply." —Paul D. Cravath

"I think we are in the presence of a new era in the organization of industry and commerce pregnant with infinite possibilities of moral progress." —Herbert Hoover

"Business men have the effective control over the mechanisms produced by science and therefore responsibility for the type of control exercised—the scientist himself has no control over the results of his thinking." —Wallace B. Donham

"The machine is the authentically embodied Logos of modern life." —John Dewey

Modern treasure, like ancient treasure, is guarded by dragons and fortresses. Most terrifying to modern seekers of treasure (cracksmen) is the protecting dragon of electricity; most formidable of fortresses are vaults like this (Central United National Bank of Cleveland). The latest thing in vaults are those of the Chase National Bank, in which repose some cash, much paper, the total value at about $4,000,000,000. Their doors are so precisely balanced on ball-bearing hinges that 38 tons of dead weight can be moved with one finger. The vaults rest on bed rock below sea level.

BURLING
PUBLIC
LIB.

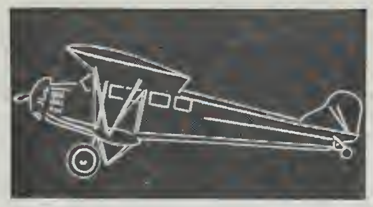
SPOKANE
SUN-GOD

This BUSINESS UP ABOVE

. . . there is money in the clouds

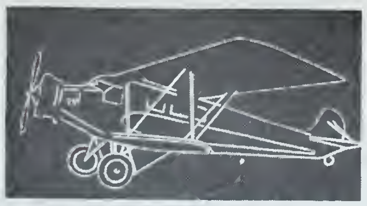
We live in an era of big business and intense activity. Time has become a priceless commodity. The executive who would utilize his precious moments to their fullest advantage . . . flies. Not because it is "the thing to do." He flies because the mature consideration of cold figures shows him that air travel is a vital part of business today. Likewise, he invests in an airplane, either for his own or for corporate use, on a similar basis of fact and figures. The Buhl line of Airsedans is created on sound business fundamentals of flying. Absolute safety is sacrificed to no other consideration whatever; comfort and economy are emphasized to the greatest extent consistent with safety; speed is a variable factor dependent upon the choice of engine. Here is the ideal choice for "this business up above."

The plane illustrated is the Buhl Standard Airsedan which recently completed the first non-stop, refueling flight from coast to coast and back again.



The Buhl Standard Airsedan is a six-place, dual control plane, powered with the new J-6 Wright Whirlwind engine.

The Buhl Sport Airsedan is a three-place plane with dual dep controls powered with either the J-5 or J-6 Wright Whirlwind engine.



The Buhl Senior Airsedan is an eight-place dual control plane, powered with a Wright Cyclone engine.

BUHL AIRCRAFT COMPANY
MARYSVILLE, MICH.

Buhl
Air Sedans
SENIOR · STANDARD · SPORT

Off the Record

Tag

ONE stormy Sunday Mr. Edward F. Hutton, of the powerful Stock Exchange house which bears his name, sat on the verandah of a shooting club whose members he had displeased by breaking the rules against shooting on the Sabbath. To the group came the club guide, excitedly telling of a great flock of wild turkeys on the club grounds. One by one each member declined to go after them until Mr. Hutton was questioned. Quickly he rushed in, donned his gay shooting togs, grabbed his gun. Warily the guide led him through thickets, into slippery gullies, under hedges that demanded belly-crawling in the slithery mud. Finally the flock of strutting turkeys was spied. Bedraggled Mr. Hutton fired his gun—corn shot from the muzzle. Realizing the club members had played a prank upon him, he leaped at the nearest fowl, grasped it in his muddy hands. On the leg was a tag reading "To E. F. Hutton, 61 Broadway, New York."

Insullficiencies

Mr. Samuel Insull has a farm of his own at Libertyville, forty miles north of Chicago. There he eats, sleeps, rises at six-thirty and does other things a man approaching seventy finds it reasonable to do. A few miles away at Mundelein, Mr. Samuel Insull in his guise of Public Service Company of Northern Illinois has a second farm. At his second farm he neither eats nor sleeps nor rises. He rarely appears. His second farm is an exhibit. There Mr. Samuel Insull, *qua* Public Service Company of Northern Illinois, shows twenty or thirty thousand people every year how agriculture can be made to pay. In a model, cement-floored, metal-stanchioned barn install a De Laval Milking Machine ($493.00), a Prater Feed Grinder ($290.00), numerous light bulbs and the requisite amount of wire; in a 19 x 21 foot, half-monitor type chicken house hang three 100 watt lamps and two ten watt lamps capable of creating the illusion of daylight in a hen's egg duct thirteen hours out of twenty-four (fourteen hours would weaken the constitution of the hens); in a clean, white dairy cooling room set up a No. 3 Bestov milk aerator ($66.00) and a Leitner Storage Tank ($250.00); in the neighboring dairy wash room plant a motor to operate them, a 2 h.p. high pressure gas-fired Kane boiler, a Frigidaire Cooling Unit ($340.00) and a circulating pump ($48.00); arrange the brooder house with a Never-Fail time switch ($18.50) and electric brooders from $29.50 to $110.00; garnish the Hog House with an electric water pump and an electric elevator for hoisting grain; install in the farmhouse electric or gas heaters, stoves, washers, wringers, ironers, dryers, dishwashers, vacuum-cleaners, refrigerators; connect the whole system with the feed lines of the Public Service Company of Northern Illinois which is constructing rural leads to meet that very need—and the estimated needs of the next half century; and turn the switch.

It is true that Mr. Samuel Insull's second farm loses money. That however is to be expected. The electric installation is extraordinarily complete. And it cost a hundred thousand dollars to begin with. Also it is not to be judged as other farms. Its principal crop is farmers. Eight hundred asked the Public Service Company for new electrical connections in 1928 and fifteen hundred in 1929—many of them after an inspection of the farm. Its secondary crop is questions. Not by farmers. A lady asked the guide and electrician how they bred their stock . . .

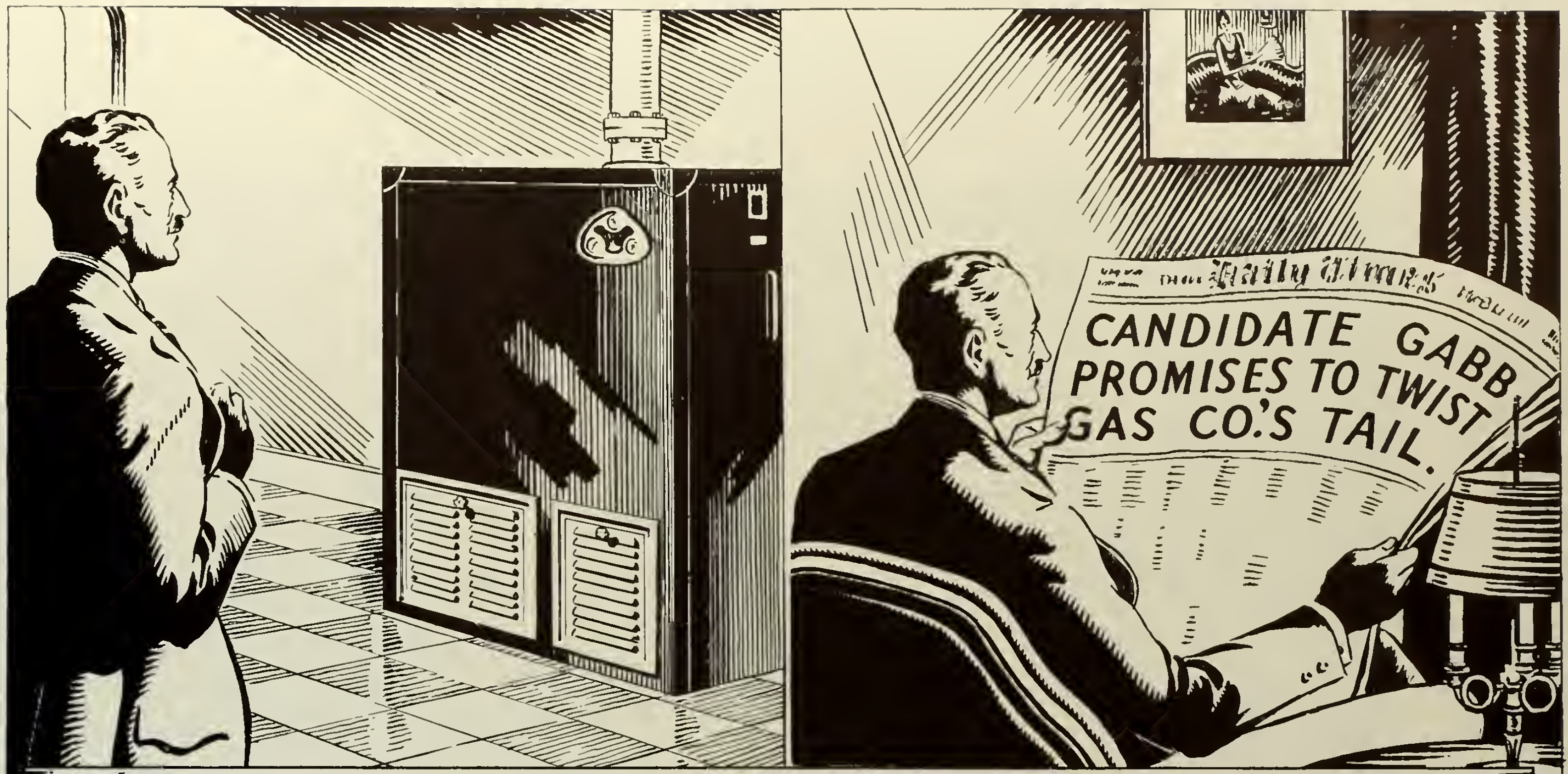
Dynamic Mr. Fisher

Professor Irving Fisher, Yale's great economist, sleeps in an electric bed. Ganglia of electrically lighted tubes surround it. From these emanate rays almost as invigorating as the sun's. To keep the Fisher body cool there is an air cooling device.

At his desk Prof. Fisher sits in an electric chair which does not shock, but merely titillates. Most of his twenty-seven assistants have tried it at one or another time, but never the negro office porter.

Prof. Fisher hates to waste time. Two summers ago when he sailed for Europe he dictated to a stenographer the while his taxicab careened to the pier. He dictated throughout the trip. While he flew from Paris to Nice he wrote a letter to his wife. He drives at sixty miles an hour whenever he can and has never been in an accident. New Haven cops consider him New Haven's best driver. He is owner and operator of a financial newspaper article syndicate which at present is losing

[*Continued on page 28*]


CANDIDATE GABB PROMISES TO TWIST GAS CO.'S TAIL.

The man who has THIS . . . . *does not encourage* THIS

FORESTALLING THE DEMAGOGUE

There was a day when popular acclaim was assured to that political demagogue who could cry loudest the sure-fire slogan ... "Down With the Gas Barons!"

The wiser demagogues today do not raise that cry. They know that influential voters are linked to the Gas Company in two ways ... as shareholders and as gas heating customers.

The discriminating citizen realizes that the surest way to safeguard his investment, and at the same time make possible more and more favorable rates, is to:

1. Discourage political attacks on the Gas Company and thus avert expensive litigation.
2. Assist the Gas Company to gain increased volume by helping it secure the house-heating business of his friends.

The demagogue offers no program so certain of success as this simple recipe for co-operation.

THE BRYANT HEATER & MANUFACTURING COMPANY
17880 ST. CLAIR AVE. :: CLEVELAND, OHIO

BRYANT GAS HEATING

...lets
your pup
be your
furnace
man

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Gentlemen's Clothes

FOR SOUTHERN
AND TROPICAL RESORT WEAR

We have originated and developed many ideas in apparel for gentlemen who dress with care and unusual distinction during their southern sojourns

The tailoring of these clothes for sports, day and evening wear, executed for us by Hickey-Freeman, is of the highest character

F.R. TRIPLER & CO.

Outfitters to Gentlemen · *Established* 1886

MADISON AVENUE AT 46 STREET

New York

money. But in time, he believes, it will pay for itself. Prof. Fisher is 62.

Brush Family

Matthew Chauncey Brush is a director of some 50 companies, and has an investment trust. All day long he makes money not only for himself and his companies but for his office boy, elevator boy and many another of his employees whose investments he manages. At night he goes home to his apartment in West 40th Street, Manhattan. There is no little wife to welcome him, but there are herds of elephants, ivory elephants, ebony elephants, bronze elephants, iron elephants, marble elephants, silver elephants, gold elephants, elephants of all the rarer stones, sizes and conditions.

All his family affections are lavished upon elephants. This has its advantages for a large-hearted man, since in this country he could have only one wife, but he may and does possess over twenty-two hundred elephants. Those which he cannot adequately stable in his apartment are handsomely taken care of in an up-to-date storage warehouse. The only kind of elephant that he does not own is a living elephant.

Nevertheless, Matt Brush's affections extend beyond his immediate family of elephants. Every year when the circus is in town he hires a box and at least once a week takes a party of his friends to that elephantine entertainment. He always visits the private apartments of the elephant performers, a thing which only one other great lover of elephants regularly does. The other is ex-Governor Smith.

Whereas Mr. Smith is rather timid with his friends, Matt Brush is on much more intimate terms with them. On every visit he has Babe, his favorite Ringling-Barnum & Bailey she-elephant, brought from her couch to dally with him. In pity for her, whom her admirers feed all day long on peanuts, he brings instead a bag of bread and carrots, which she eats from his hand.

Sometimes instead of going to the elephants, the elephants come to him. Four years ago he gave a dinner on the roof of the Waldorf-Astoria Hotel. Two elephants were brought up in elevators to entertain him and his guests. A steel ring was set up and not only the elephants, but lions, clowns, horses, and sideshow freaks appeared to give a complete performance for his benefit.

Edibilia

To Mr. James N. Gamble, of Procter & Gamble Co., is served each day one special dish. It is called "graveyard stew", and consists of a bowl of applesauce, into which graham crackers are broken, and upon which is poured a pint of milk.

To Sir Henry Thornton, brilliantly successful and recently reappointed director of the Canadian National Railways, is served each day one special dish. It is called caviar, and consists of the eggs of sturgeon, reclaimed from the Baltic Sea and shipped, by Slavs who do not like them, to Anglo-Saxons, who do.

Rich Mormon

It would be practically impossible to engage in any sort of legitimate business in Utah without running into Heber Jedediah Grant. His name has gone forth in the land of the Latter Day Saints. One can hardly pick up a Utah business letterhead without finding "Heber J. Grant" engraved somewhere on it. He is President of the Utah State National Bank, of the Zion City Savings Bank & Trust Co., of the Utah Home Fire Insurance Co., of the Zions Cooperative Mercantile Institute (the R. H. Macy of Salt Lake City), and, of course, of the Heber J. Grant & Co. He is a trustee of *The Desert News*, a director of the Beneficial Life Insurance Co. He is chairman of the board of the Utah-Idaho Sugar Co., which owns 24,539 acres of farm lands. He is at the head of the company owning the Hotel Utah.

But the local renown of Heber Jedediah Grant rests on none of these positions. To the people of Utah his name is mighty because he has long been President of the Mormon Church, or, as its members prefer to call it, the Church of Jesus Christ of Latter Day Saints. Unlike other American religious bodies, the Mormon Church is wealthy. Every Saint is supposed to contribute to the Church one-tenth of his earnings, a tithe of mediæval fatness. Most Saints are good business men, and so the Church has an annual income estimated at $20,000,000. This is used for missionary work and to take care of such Saints as are *not* good business men. The surplus is invested, with two strings attached; the enterprise must be "for the good of the people," and it must be sound.

[*Continued on page 34*]

W. F. Merrill, President, Remington Rand, Inc., one of America's great business organizations, appreciates the quiet of a carpeted office.

THE world owes a lasting debt to Quietness. Accomplishment has always come through silence.

You spend from six to eight hours in your offices every working day. Have you ever thought what undisturbed quietness can mean to you there? It can increase the value of your time by making concentration possible—and productive. It can save your nervous energy to spend constructively. It can *make* you think things through—not only you personally, but all your important executives and department heads who are also paid to think.

Carpets can give you this "concentrative" quietness in your offices as nothing else can. They deaden the clump and click of heels, and much more. They do what no other floor surfacing can do. They *absorb*, blotter-like, indirect noise—the shriek of motor horns, the buzz and clatter of men and machines.

The Mohawk Carpet Mills has fabrics that will *quiet-ize* your offices. Its 23-color range of Broadloom carpets is ideal for office use, combining soft beauty with the economy of long wear—and endless Quiet. There is a Mohawk dealer in your city, equipped to serve you. Call upon him.

MOHAWK CARPET MILLS

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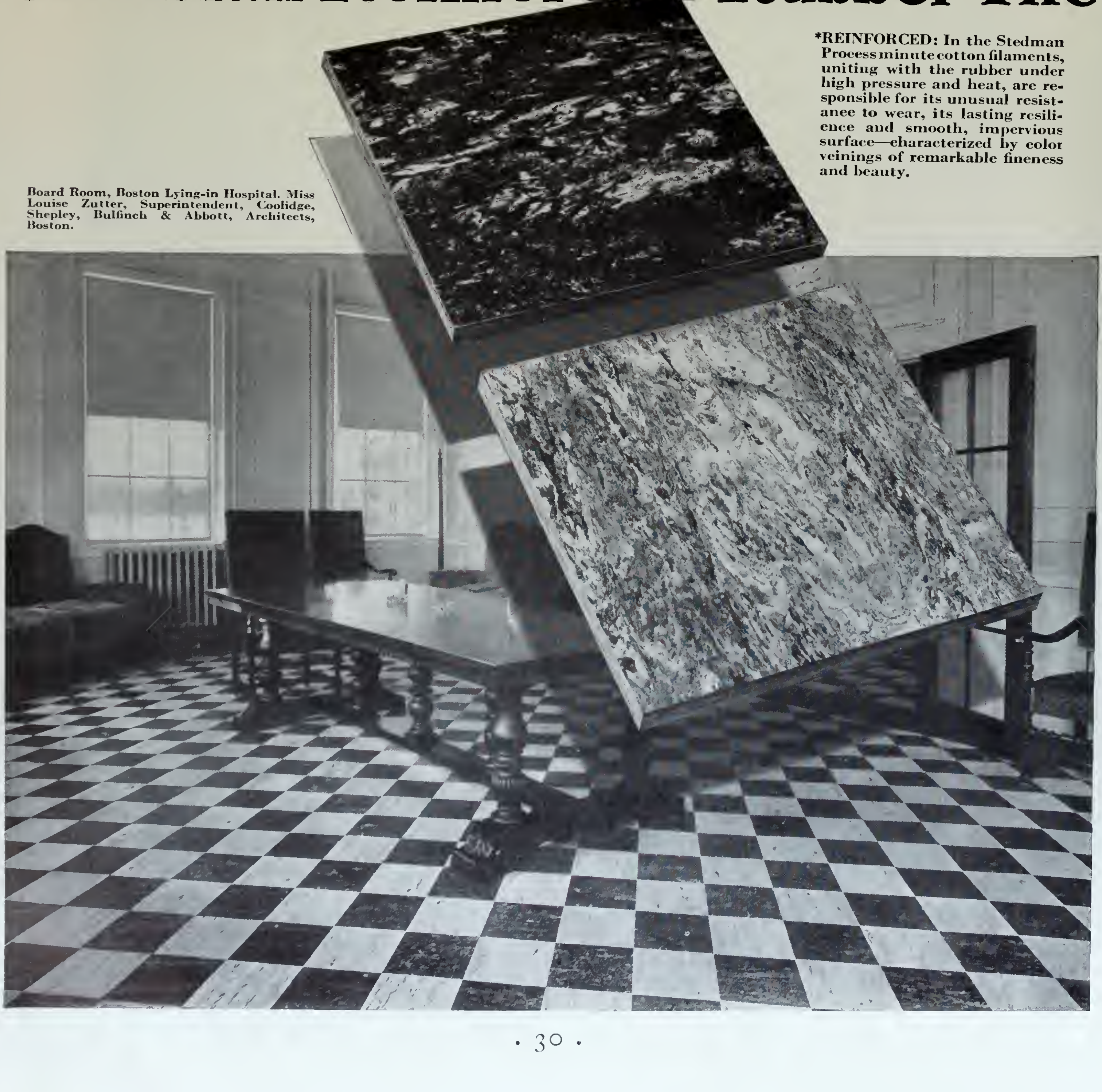
longer wear
more comfort
greater beauty

are to be expected of Stedman Reinforced Rubber Tile Floors. Through a scientific process of manufacture new rubber is adapted to resist wear, to retain the firm resilience that absorbs shock and deadens sound; to ever present a smooth, lustrous surface, impervious and sanitary, characterized by natural color mottlings of unusual fineness and beauty. Produced and laid by experts to meet the practical and decorative needs of each installation. A book describing the Stedman Process and showing installations, with a large number of pattern suggestions in full color, will be sent free on request. STEDMAN PRODUCTS COMPANY, SOUTH BRAINTREE, MASS.

Stedman Reinforced* Rubber Tile



***REINFORCED:** In the Stedman Process minute cotton filaments, uniting with the rubber under high pressure and heat, are responsible for its unusual resistance to wear, its lasting resilience and smooth, impervious surface—characterized by color veinings of remarkable fineness and beauty.

Board Room, Boston Lying-in Hospital. Miss Louise Zutter, Superintendent, Coolidge, Shepley, Bulfinch & Abbott, Architects, Boston.

GEORGIA MARBLE *is selected and used by many prominent Architects and Sculptors who do not care to risk their clients' funds on uncertain materials*

Bok Singing Tower, Mountain Lake, Florida, built largely of Etowah Pink Georgia Marble and some Creole Grey Georgia Marble. Milton B. Medary, Architect; Frederick Law Olmstead, Landscape Architect; Lee O. Laurie, Sculptor

INEXHAUSTIBLE SUPPLY
ADEQUATE PRODUCTION FACILITIES

THE supply of marble in the Georgia hills — White, Pink, Grey, and a variety of special colors — is adequate for countless generations. Eight quarries and three finishing plants in operation throughout the year ensure prompt deliveries on all contracts.

TANGIBLE EVIDENCE

The Georgia Marble subjects illustrated here are graphic three-dimensional testimonies to the beauty, soundness, and durability of this exceptional marble. When you select Georgia Marble, be it for a garden bench or a great building, your choice is backed up by experts whose search for a beautiful enduring material has also led *them* to Georgia Marble.

Federal Reserve Bank, Cleveland, Ohio, built of Pink Georgia Marble. The heroic statues are also Pink Georgia Marble, but a lighter shade of pink than the marble used for the building. Walker and Weeks, Architects.

Lincoln Statue, carved from 28 blocks of White Georgia Marble, Lincoln Memorial, Wash., D.C. Henry Bacon, Architect; Daniel Chester French, Sculptor; Piccirilli Brothers, Carvers and Erectors.

W. A. Clark Jr. Mausoleum, Hollywood Cemetery, California, built of White Georgia Marble, each pediment was carved from a solid block of marble over 25 feet long. Robert D. Farquhar, Architect.

THE GEORGIA MARBLE COMPANY ◆ TATE ◆ GEORGIA

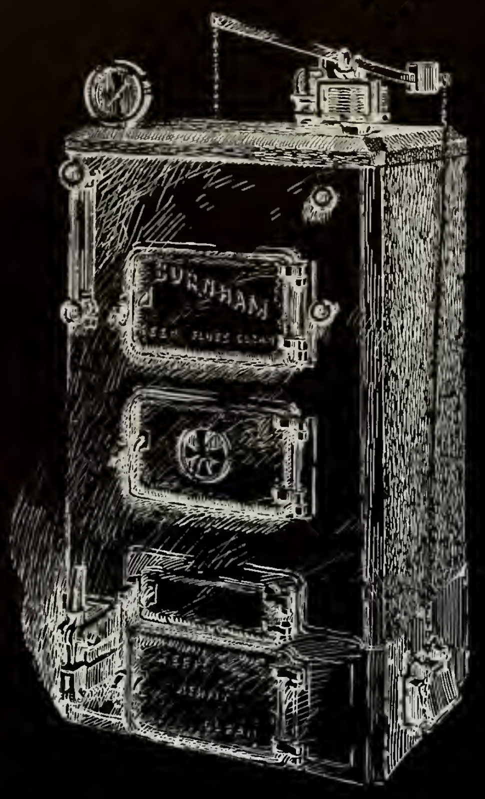
1328 Broadway
NEW YORK

814 Bona Allen Bldg.
ATLANTA

648 Builders' Bldg.
CHICAGO

622 Construction Industries Bldg.
DALLAS

1200 Keith Bldg.
CLEVELAND



Now That Economy Counts For So Much

Burnham Boiler's long fire travel counts more than ever. Its long fire travel makes its short coal bill.

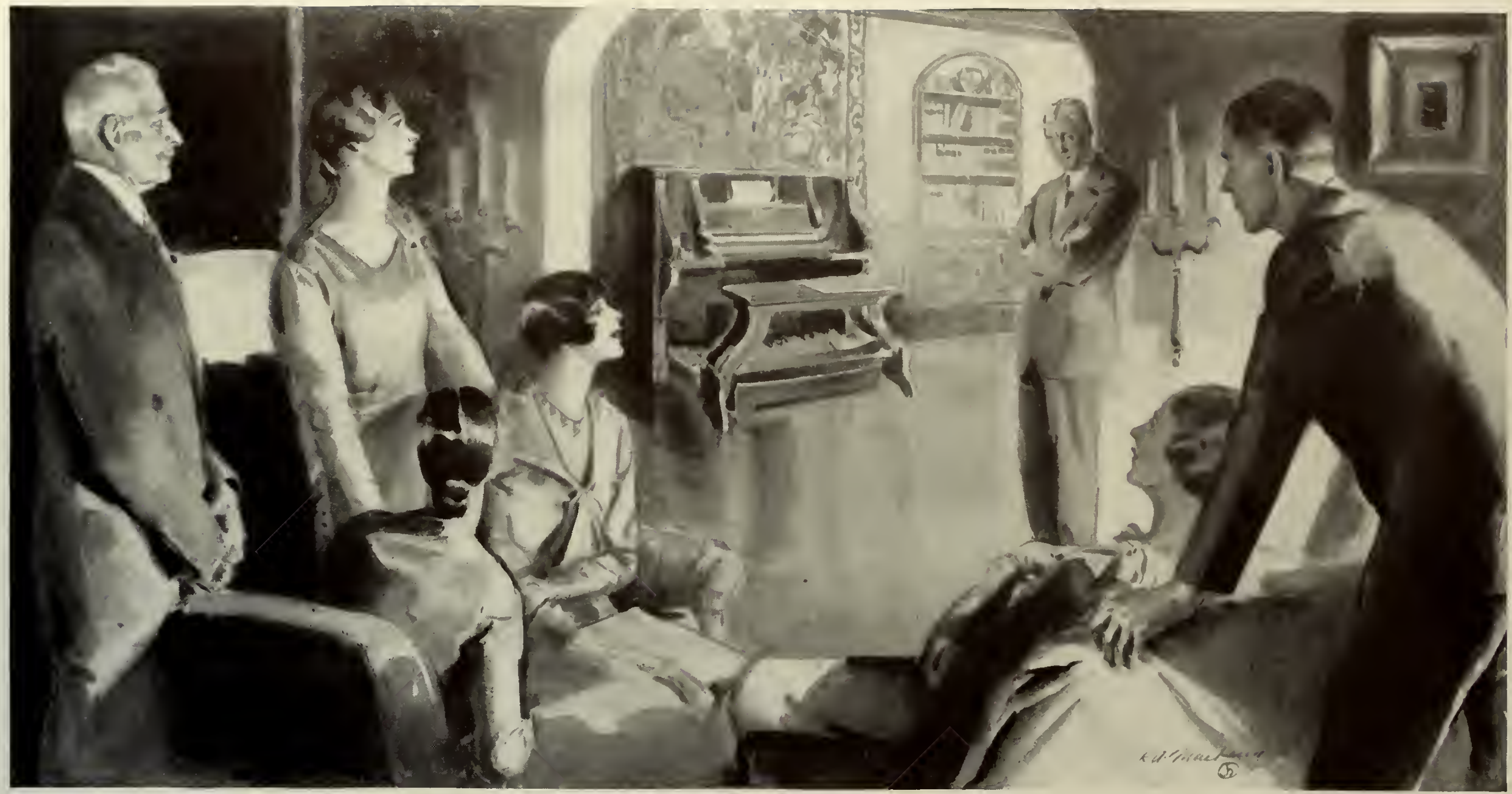
P.S.—

This same long fire travel is an additional insurance of economy, when oil is the fuel. It also has a way of muffling down combustion noises.

P.S.—P.S.—

There's a booklet called Letters To and Fro that tells of eight people's successful solution of eight separate home heating problems. Send for it.

Burnham Boiler Corporation
IRVINGTON, NEW YORK
Representatives in all principal cities of the United States and Canada



Entertaining is a rare delight with a

WURLITZER REPRODUCING ORGAN

THERE'S a lull in the conversation. Then, an expectant hush, as you touch an electric button; and instantly, your guests are listening enraptured to the glorious harmonies with which your Wurlitzer Reproducing Residence Organ floods your home. Symphonies, ballads, classical or popular selections as you will, all are rendered with that brilliant blending of countless tone colors, that soul-stirring grandeur which make the pipe organ the acknowledged "King of Musical Instruments." For entertainment on all occasions, the Wurlitzer residence pipe organ, played either by hand or by reproducing music rolls, and requiring surprisingly small space, brings you the world's best in music. There is no measuring the value of the pleasure it gives your guests and your family, the cultural development it affords your children, the distinction it adds to your home. Yet the cost is only about half what you would expect to pay for so wondrous an instrument. You are invited to hear and play it at the nearest Wurlitzer Studio—New York, Buffalo, Cleveland, Cincinnati, Detroit, Los Angeles, Chicago, Pittsburgh

WURLITZER
REG. U.S. PAT. OFF.
Reproducing Residence
ORGAN

AN EXTRAORDINARY NUMBER of business firms today have standardized on Crane's Bond for *all* their correspondence . . . They have an odd way of thinking that any letter on firm business important enough to be dictated, signed and mailed is *important.*

CRANE'S BOND

for letterheads and envelopes

CRANE & CO., Inc. • DALTON, MASS.

Crane's Bond is a 100% new white rag paper. Crisp, important, authoritative, it unmistakably reflects standing, prestige, dignity . . . Naturally, Crane's costs a bit more than the usual letterhead — but not nearly so much as you may have expected.

H D

Even as a boy Heber Jedediah Grant was distinguished—for his penmanship and his baseball. He looks the part of a Saint: he is tall, deep-voiced, with copious whiskers and a Duke of Wellington nose. In spite of his multitudinous business activities, he insists that his total wealth today does not exceed $50,000.

Rich Hindu

The people of India are not renowned as industrialists, but there are exceptions. For example, the Tatas, father and son. About fifty years ago old Jamsetji Tata founded the Empress cotton mills at Nagpur. In ten years his mills had become the biggest in India. As soon as the Empress Mills were running smoothly, he and his son, Dorabji, proceeded to build some apartment houses, an hotel, a huge Institute of Science at Bangalore, and the Tata Iron & Steel Works. Before the steel works were completed, old Jamsetji died. His son finished the job in 1911, and within three years the works were paying dividends to 8,000 native stockholders. During the war the Tata works supplied to the British government some 300,000 tons of rails, shell steel and structural iron for the campaigns in Mesopotamia, Salonica, Egypt and East Africa. Tata dams and reservoirs on the Ghauts now supply light and power to most of Bombay. For his labors, Dorabji Tata has been knighted. Several years ago he bought the third largest diamond in the world, the celebrated Jubilee Diamond, from a syndicate of jewelers.

Not only are the Tatas entrepreneurs and patriots, they are also philanthropists. To make Nagpur a model industrial city, they enlisted the aid of John L. Mott, young and able son of the man who put the Y.M.C.A. around the world. The Junior Mott now lives in India, making his life work the improvement of conditions under which the natives work.

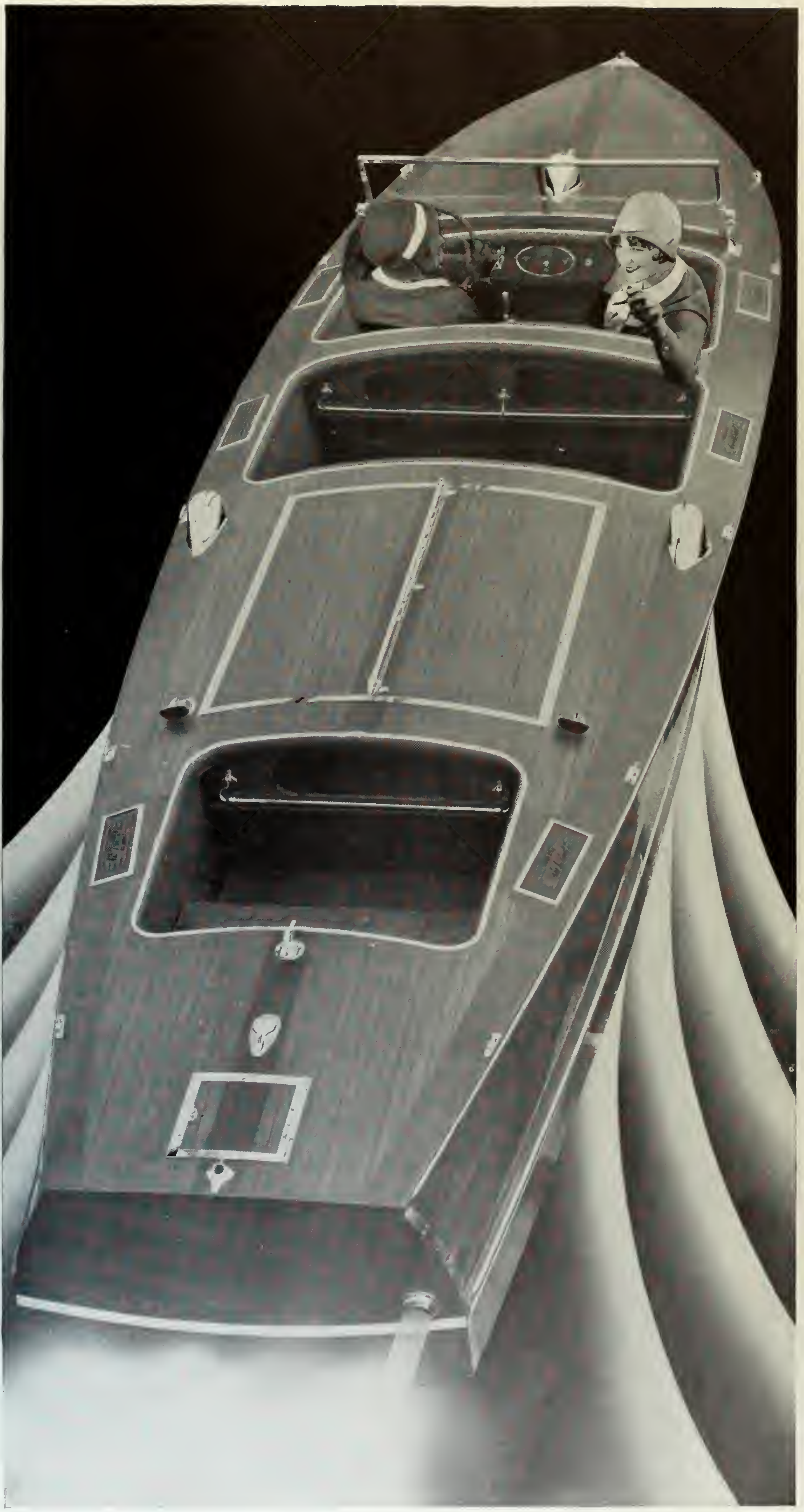
Bell of Bell-Cow

When John D. Rockefeller, Jr., goes to California he likes to stay at Glenwood Mission Inn in Riverside. The master of Glenwood Mission Inn is Mr. Frank A. Miller, known in many a state as a hotel man, but more widely known as a collector of bells and possessor of the largest collection in the world.

His first bell, a small Italian one, was given to him as a 1905 Christmas present from his daughter. He now owns a series of bells from Herod's palace and the bell of the bell-cow of Pope Paul III (1534-49). He also owns a Lili bell, made of a hollowed tree trunk, and used by Fiji Islanders as a signal which can carry as far as 100 miles. Mr. Miller's Lili bell was given him by Charles Kellogg, vibration expert of the Orpheum Circuit. One of Mr. Kellogg's favorite diversions is to find the vibration key of a gas flame and extinguish it by sounding a note on a pipe. The gas itself, however, he prudently turns off by hand.

Junk

Most junkmen aspire no higher than old bottles, rusty pots and pans, or, at the most, automobile parts. Not so Herman Sonken, of Kansas City, whose voracious, capacious appetite has obliterated whole factories, railroads, townships. The late Jacob Volk, eminent Manhattan house-wrecker, may have called himself "the most destructive force in Wall Street," but such flippancies are not for Herman Sonken. Three years ago he became a railroad president. When his company, the Sonken-Galamba Corp., bought a failing electric railway system, commuters asked Mr. Sonken to run it himself. Intrigued, he did so—and made money on it. He intends to supply fuel oil to Kansas City industries through an underground refrigerating pipe system which he recently bought for junk. His first venture in junk—breaking up wagons and buggies for their metal—he always calls "a reclamation project". From wagons he extended his reclaiming activities to automobiles, and then to railroads and factories. He has bought and junked for metal twenty-seven railroad systems, the largest being the 79-mile Cincinnati, Bedford & Chicago. He has "reclaimed" a village of 396 acres (Nidco, Mo.) and a complete powder mill (the du Pont mill at Holmes Park, Mo.). Twenty-five acres dotted with sheds and warehouses are necessary to handle the 5,000 carloads of scrap metal salvaged yearly by his company. Last year Herman Sonken achieved his masterpiece of reclamation: he purchased all the antiquated cells and doors of the federal penitentiary at Leavenworth, sent them east to be made into steel work for churches and schools.



BUILT by Gar Wood—by the same craftsmen who build the Miss Americas, year after year the fastest boats of their time!

How superfluous to say anything more about Gar Wood runabouts.

Yet, you may be interested in knowing, as a shrewd investor, that these stock runabouts that Gar Wood builds are put together of the same identical materials and with the same care and skill as are the Gar Wood custom boats.

One man pays $35,000 for a boat, another $10,000. One has a special design, the other a stock model. Yet each is as fine a craft as the finest materials and the best skill can produce.

And if you have seen the new 1930 models at the Motor Boat Show, you know how graceful, how modern, how versatile they are. If not, permit us to send you the detailed information on the softest-riding speed boat ever built.

Ten Models—30 to 55 m. p. h., $3,150 to $12,950

GAR WOOD Inc.

THE GREATEST NAME IN MOTORBOATING

415 Connecticut Ave.
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1860 Broadway
NEW YORK CITY

Gar Wood, Inc.
415 Connecticut Avenue, Detroit, Michigan
Gentlemen:—

I shall be glad to have your booklet on the 1930 Gar Wood Boats—without obligation, of course.

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F-1-30

Who is Buying Modern Lowestoft?

JUST the families we expected! The first families, the families of lineage, the families of background, the families who now treasure the precious old cups and saucers, dishes and plates that have come down to them from the cupboards of earlier generations.

ANTIQUE LOWESTOFT, of course, is becoming more and more unobtainable. Connoisseurs number it among their priceless possessions.

MODERN LOWESTOFT is the result of the discovery of a secret formula last used by the Copeland Spode factory in 1805—a most important discovery, for now at last has modern ingenuity succeeded in producing a new Lowestoft worthy of its new mission—to carry down to posterity the sentiment of family pride in the exquisite things that belong to this day and age, "when today is a hundred years ago."

MODERN LOWESTOFT services are now being made in England, in a limited quantity, FOR PLUMMER'S EXCLUSIVELY—nowhere else in America can they be found. With your crest or monogram placed upon each piece, you will create a worthy monument to your house and name. Dinner plates, $75 a dozen. Tea cups and Saucers, $75 a dozen. Special monogram, crest, or coat-of-arms, extra. Inquiries invited.

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Modern and Antique China and Glass
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Statistics

Billions

FIFTY years ago a man made his hundred thousand. A generation ago he made his million. Now a few of them have made, or are about to make, or are generally said to be about to make, their billion. A billion has become a possible fortune. The stock of General Motors swung through a maximum loss in value in 1929 of two and a half billions. Stocks on the New York Stock Exchange lost twenty-six billions of value in the fall of 1929. United States Income taxes exceed two billions. Total resources of United States banks exceed seventy-three billions. The United States produces about a billion barrels of oil per year (allowing a hundred billion cubic feet of natural gas to waste) and over a hundred billion standard-size cigarettes. United States Post Offices handle yearly seventeen billion pieces of first class mail. The United States produces ninety-two billion units of electricity in a year. There are approximately two billion human beings on the earth.

In other words we are surrounded by billions. And yet no man has ever identified a billion with his eyes. As for the population of the earth, the earth is, fortunately, round; as for the hundred billion cigarettes a year, a-billion-a-year is a kind of metaphysical Jabberwock a year long and a billion thick and no man has ever laid his living eyes on that. Even in hard cash a billion is invisible. There are not five billion cash dollars in the whole United States and a billionaire is a creature of faith like an angel for no billionaire could liquidate for a billion. The whole concept of a billion is a combination of mathematics and belief; it is obvious that a thousand times a thousand times a thousand is a billion: therefore a billion must exist. But the theologians were accustomed to prove the existence of somewhat different intangible entities by the same means. ("Ten thousand times ten thousand in shining raiment bright" are not a billion.)

The easiest way to conceive a billion seems to be to stretch it over time or space. Of a billion dollars left in the Age of Pericles to be paid out at the rate of a thousand dollars a day there would remain a hundred millions. The row of one billion gold dollars Mr. Ford has been laying down, end to end, from Bombay to Boston has just been suppressed at the Fenway after 9,233 rollicking miles. All of which comes down to saying that a billion is a long way and a very long time. As a mass it is equally impressive. A billion bricks would erect the sheathes of fifty-nine Woolworth Buildings. Fifty-nine Woolworth Buildings are, however, unnecessary.

The easiest thing to believe about a billion is that a billion people lacking a few millions ride on the New York subways every year.

Perhaps the most effective way of realizing the dimensions of a billion dollars is to make it.

Penny

"I heard a wise man say Give crowns and pounds and guineas But not your heart away . . ." Young men, however, are apt to be careless of their hearts, mindful of their pounds and guineas, but rarely, very rarely, mindful of their pennies. A penny, they know, will tell them their weight, will purchase exactly one stick of chewing gum. Some may even know that a penny will light a 40-watt bulb—for three and a half hours. But pennies are generally a nuisance. You get them when you buy a newspaper. You can never tip with them.

But this a penny can do, so scorn it less: one penny can move a ton of coal one mile, almost, by rail. By sea one penny can move a ton of coal fifteen miles, which, incidentally, is 79,200 feet.

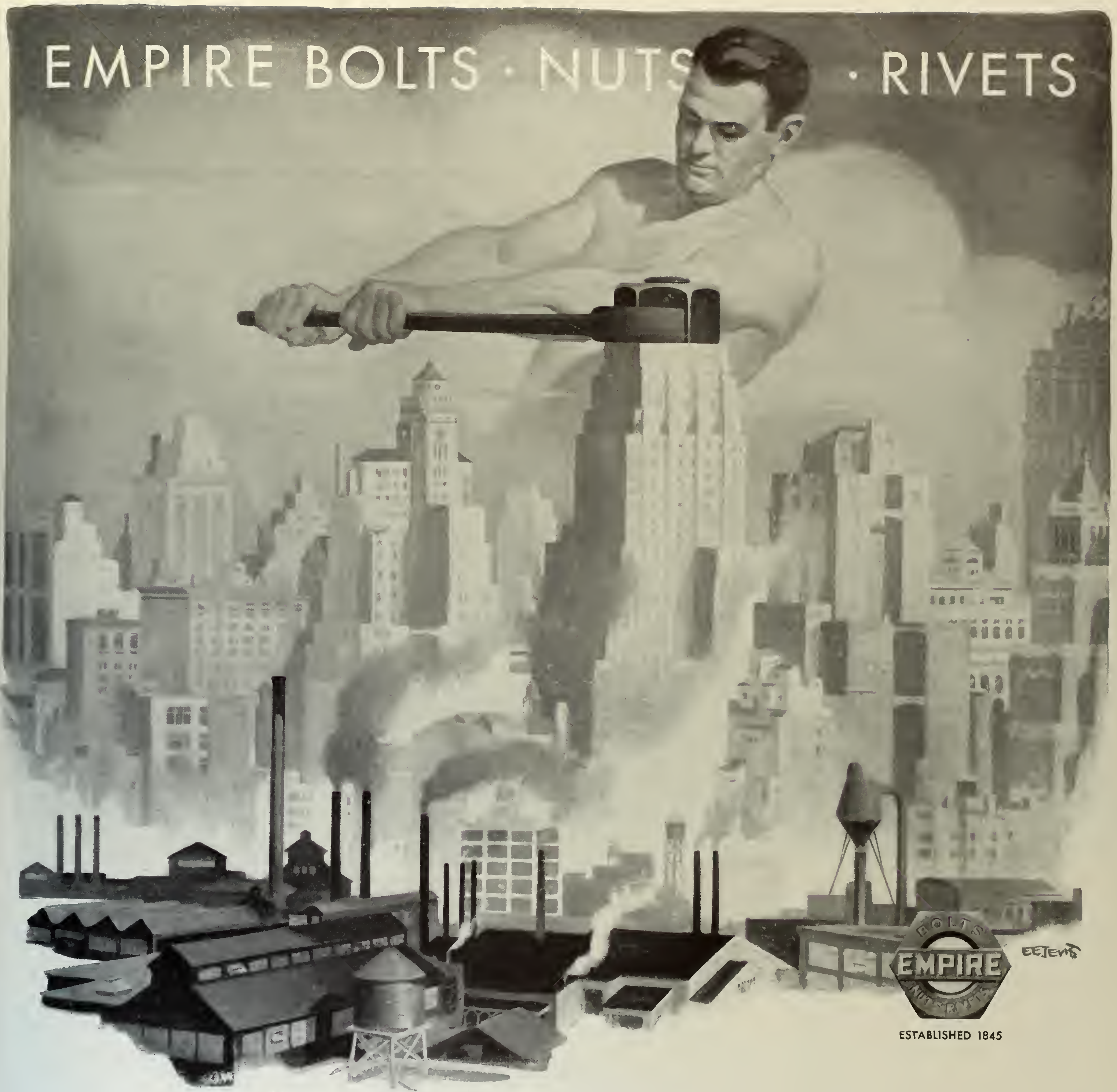
What a child may know

Great Britain, with over 20,000,000 tons of steamers (of over 1,000 gross tons each), has more transoceanic shipping facilities than the next five nations combined—the United States, 3,900,000 tons; Japan, 3,700,000 tons; Germany, 3,284,000 tons; Italy, 3,195,000 tons; France, 3,021,000 tons. There are 51,223,000 square miles of land on the earth of which the continental U. S. forms less than six per cent. Of people, the U. S. also has about six per cent.

* * *

Under the ground in the U. S. is enough coal to give every person in the U. S. 23,000 tons although the average consumption is only six tons a year. Liberal estimates of the oil reserve place it at one per cent that

[*Continued on page 38*]



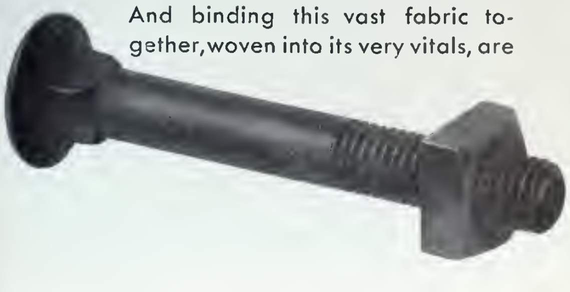
THE WORLD IS HELD TOGETHER WITH BOLTS, NUTS AND RIVETS

This is the age of building! Of great cities with their towering buildings, growing from thousands to millions in a few decades! Of vast industrial communities of factories and dwellings springing up almost overnight!

And binding this vast fabric together, woven into its very vitals, are millions an millions of bolts, nuts and rivets.

For eighty-five years the firm of Russell, Burdsall & Ward have been supplying these essential bits of metal that industry, the material sub-structure of our civilization, might go on.

The ideals on which this business was founded in 1845, the conviction that high quality, prompt service and absolute square dealing were the sum total of business, have had their justification in the fact that so large a proportion of the world's consumption of bolts, nuts and rivets are branded EMPIRE.



RUSSELL, BURDSALL & WARD BOLT & NUT COMPANY

ROCK FALLS, ILL. PORT CHESTER, N. Y. CORAOPOLIS, PA.

SALES OFFICES AT PHILADELPHIA, CHICAGO, DETROIT
SAN FRANCISCO, LOS ANGELES, SEATTLE, PORTLAND

Purpose

FORTUNE'S purpose is to reflect Industrial Life in ink and paper and word and picture as the finest skyscraper reflects it in stone and steel and architecture.

Business takes FORTUNE to the tip of the wing of the airplane and through the depths of the ocean along be-barnacled cables. It forces FORTUNE to peer into dazzling furnaces and into the faces of bankers. FORTUNE must follow the chemist to the brink of worlds newer than Columbus found and it must jog with freight cars across Nevada's desert. FORTUNE is involved in the fashions of flappers and in glass made from sand. It is packed in millions of cans and saluted by Boards of Directors on the pinnacles of skyscrapers. Mountains diminish, rivers change their course and thirty million people assemble nightly at the cinema.

Into all these matters FORTUNE will inquire with unbridled curiosity. And, above all, FORTUNE will make its discoveries clear, coherent, vivid, so that the reading of it may be one of the keenest pleasures in the life of every subscriber.

And, if your reading of FORTUNE'S current discoveries as reported in this first number has given you keen pleasure you may, we assure you, look forward with anticipations of even greater pleasure in the second and the third and the following issues.

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of coal, or a few hundred barrels for each person. Of this supply we use about eight barrels a year.

* * *

Fifteen years ago 70 per cent of the toys bought in this country came from Germany. Now 90 per cent are made in the United States.

What few children know

At the San Francisco waterfront 16 men can unload a cargo of copra in one fourth the time it took from 200 to 300 men to load it in the Philippines. Machinery at San Francisco accounts for the difference.

* * *

From the fishermen of British Columbia and New Brunswick American business men in 1927 bought 2,820 cwt. of herring scales. Their use: the manufacture of artificial pearls. Recently herring scales have been in less demand, pearl makers using synthetic pearl essence which is chemically the same as calomel.

* * *

In the United States 45,500,000 men are employed, but electricity and machines bring the total annual manpower to over 600,000,000 men. A conservative estimate of the energy output in terms of manpower is:

Electric power	337,880,000
Railroads	127,000,000
Agriculture	73,070,000
Manufacturers	70,000,000
Mines and quarries	17,600,000
Automobiles	12,200,000
	637,750,000

* * *

A motor car selling for $3,000 represents about $200 worth of direct labor factory costs. $1,200—or 40 per cent—is accounted for by expense of distribution.

* * *

Without machinery, 1,000,000 men could build 10,000 Fords at a cost of $10,000 for each car which, of course, is only a figure of speech.

* * *

A wire so fine that it would stretch twice around the world could be drawn from one cubic inch of platinum.

* * *

A round lake five miles in diameter and four feet deep would contain 14,000,000,000 gallons—a quantity just about equal to the amount of gasoline consumed in the United States last year.

* * *

In the Wall Street district alone 850 miles of ticker-tape are used daily.

SW & Co
A NATIONAL ORGANIZATION FOR CONSTRUCTIVE SERVICE

Budgetary Control

An address on this subject delivered at the annual meeting of the Babson Statistical Organization is now available in booklet form and will be sent to interested executives.

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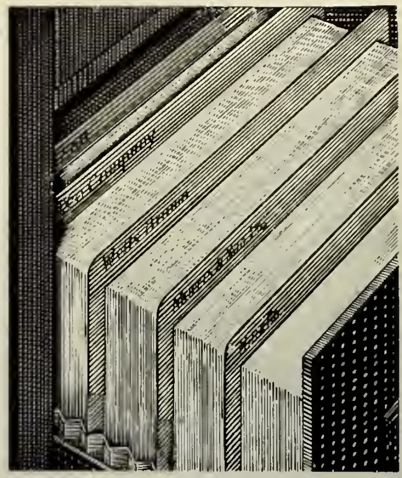

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FILE POCKETS

are firm, durable, expansible filing containers that can be used in any vertical filing system. . .

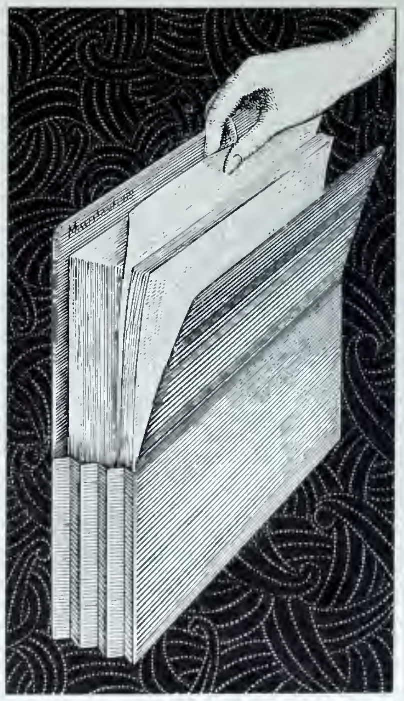
They never slump down in the file drawer, but stand erect with the index tab always in plain view; hold three or three hundred letters with equal facility, are easy to remove or replace in the file, hold small papers as well as large with never a chance that they will become lost or misfiled; save time in daily filing and finding papers; improve instantly the efficiency and appearance of the drawer. .

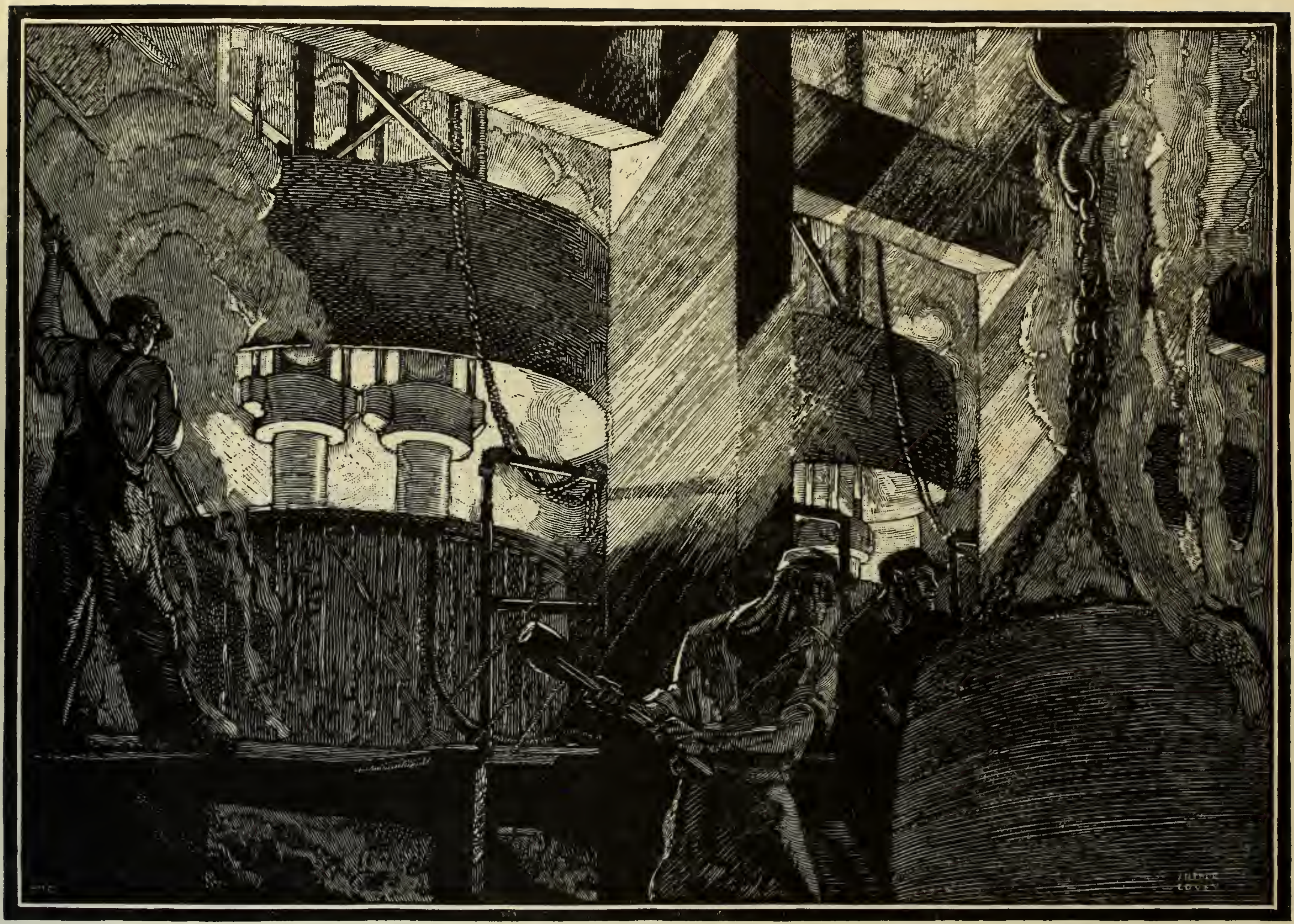
Ordinary flat folders lack all of these advantages. They were never intended to contain many papers or for continued use. Your own files will show the need of something better for your heavier correspondence. . . . . .

You will know what real filing satisfaction is the minute you install "Vertex" File Pockets to replace the bulkiest of your present folders. . . . .

A free sample file pocket will be sent you for trial if you will address us on your business letterhead, mentioning "Fortune" and stating whether letter size or legal size is desired.

Alvah Bushnell Company
Dept. F, 13th & Wood Sts., Philadelphia, Pa.





DAY and night, a veritable inferno of electric heat burns on. The clay-like mineral bauxite—transformed by fire—becomes the potent Norton abrasive trade-marked « Alundum, » serving the world in grinding wheels, refractory ware, porous plates, non-slip floor materials.

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Grinding Wheels
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Floor and Stair Tile
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Grinding and Lapping Machines

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Capital, Surplus and Undivided
Profits $45,000,000

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100 BROADWAY

40TH STREET AND MADISON AVENUE   57TH STREET AND FIFTH AVENUE

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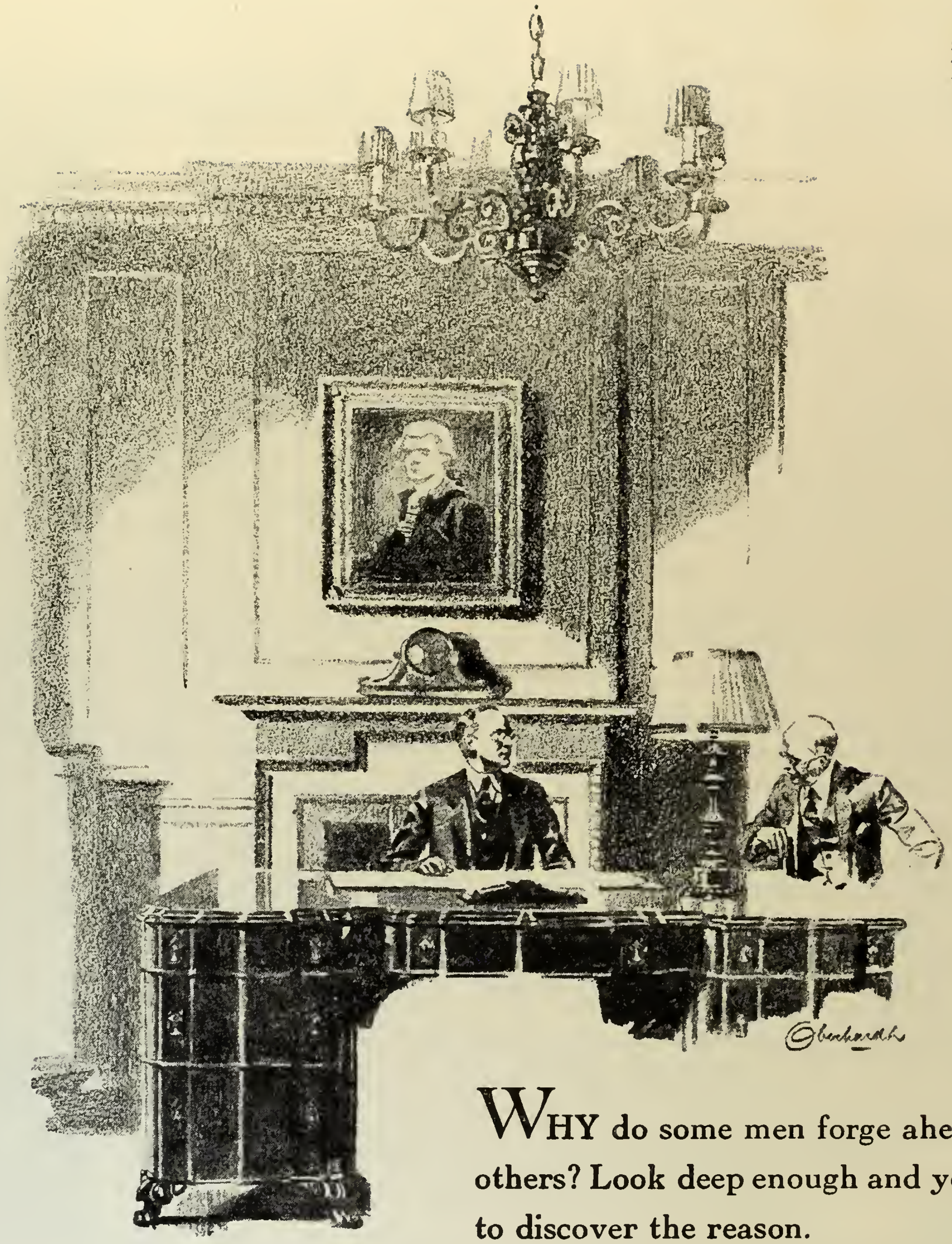

WHY do some men forge ahead faster than others? Look deep enough and you will be sure to discover the reason.

Successful men invariably know how to focus every influence that will make for their progress. They never overlook a single form of aid. That is why we are commissioned to design, decorate and furnish their offices!

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Equipment Specialists

How Much Should I Lay Aside for Life Insurance?

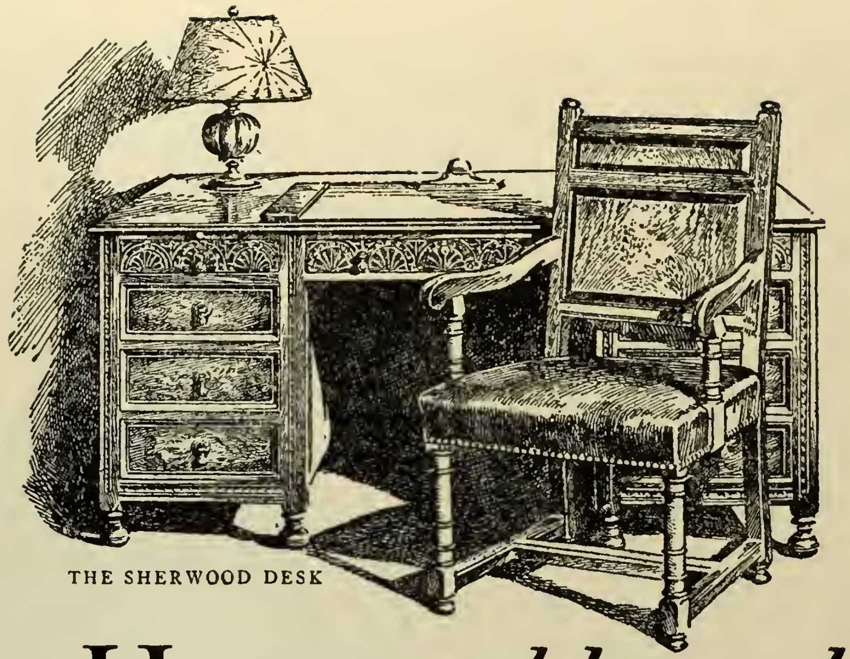
THIS is a question asked the life underwriter more frequently than any other. What proportion of his income can a young man put into life insurance premiums, especially if he is married? ❡*Concrete facts speak louder than words.* ❡Here is the actual program of a young man, 28, married, with two children. ❡His income is $5,000 a year. What would you consider a fair proportion of this income to lay aside for life insurance? Ten per cent? ❡Actually in this case the annual premiums amount to about $600 leaving a balance of $4,400 of the income for the support of the family, an easy proposition for ambitious young parents looking into the future. ❡What do *they* get for *their* $600? ❡Total life insurance of $30,000,—$5,000 to be paid in cash in case of the husband's death, the rest so arranged in a trust settlement as to provide $100 a month income for the wife during her lifetime, the remaining principal to go to the children after her death. ❡Do you not think this young man has done well for himself and his family? ❡Surely he has laid out his life very successfully, with a fair income for present living expenses and an estate of $30,000 to leave for his family. ❡He might struggle for years to obtain such a result in other ways, and then fail of his goal, in the meantime missing the best there is in life, including the contented enjoyment of his income and his family.

How near can You get to this? Let us help you work it out.

John Hancock
MUTUAL
LIFE INSURANCE COMPANY
OF BOSTON, MASSACHUSETTS

Sixty-seven years in business. Outstanding Insurance over Three Billion. More than 4,500,000 policy holders. If your policy bears the name John Hancock, it is as good as any bond.

This border is adapted from the design of the frame used by John Singleton Copley for his famous portrait of John Hancock

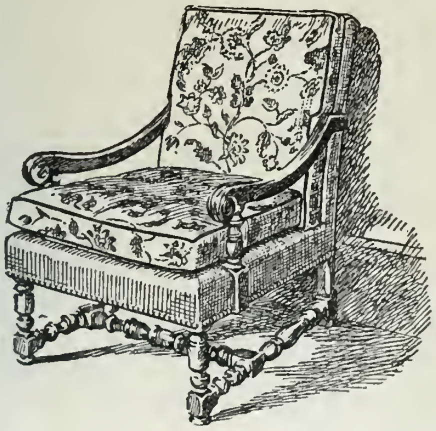


THE SHERWOOD DESK

How would you like to own an office that people will remember?

ON the twenty-eighth floor of the Graybar Building there looks out upon the bridge-spanned blue of the East River the office of a noted advertising executive—an office extraordinarily pleasant and comfortable.

The desk in this impressive room is rugged and uncompromising as the high spirited man who now and then grows impatient with slower moving minds and pounds his fist upon it. Three hundred years ago, in merry England, the chests that inspired this desk were made. Today—English oak from Sherwood, rich in pollard grain and burls, is joined by Danersk craftsmen with the precision of modern construction and the interest of the old time panels and carving.



THE QUEBEC CHAIR

Hanging on the walls is a trophy from the north woods, of personal significance; and beneath it a pair of English Windsors, ample in proportion and of rare form, from a famous collection.

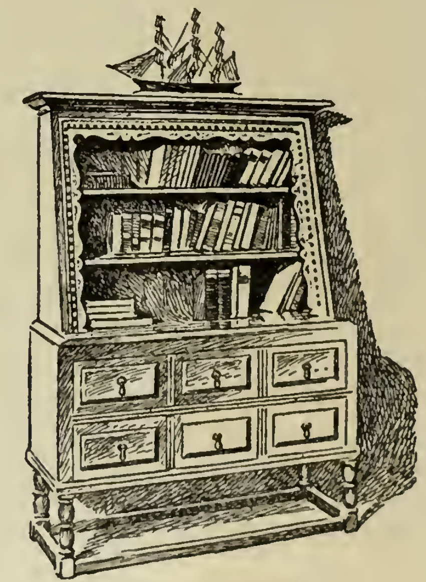
Over in the corner a deep cushioned chair from old Quebec invites to quiet pondering of future plans after partners and employes have gone home.

But the pinnacle of the whole room, the swashbuckling piece which by itself creates the mellow atmosphere of a gentleman's study, is an open racked ship's cupboard in which are stacked editions of Kipling, Conrad, Eugene O'Neill. In just such a cupboard, old-time Salem mariners used to display the treasures collected on their adventurous voyages to the Orient.

These are a few of the interesting designs personally selected by this executive that form a small collection—rich in meaning, and yet at no greater cost than any well made furniture.

You would enjoy an office like this. You, too, can have the association of furniture interesting, vigorous and inspiring—Danersk furniture—faithful to the rich traditions of the past—carefully built by hand by Scotch and English craftsmen.

Send for our brochure, "The Livable Office."

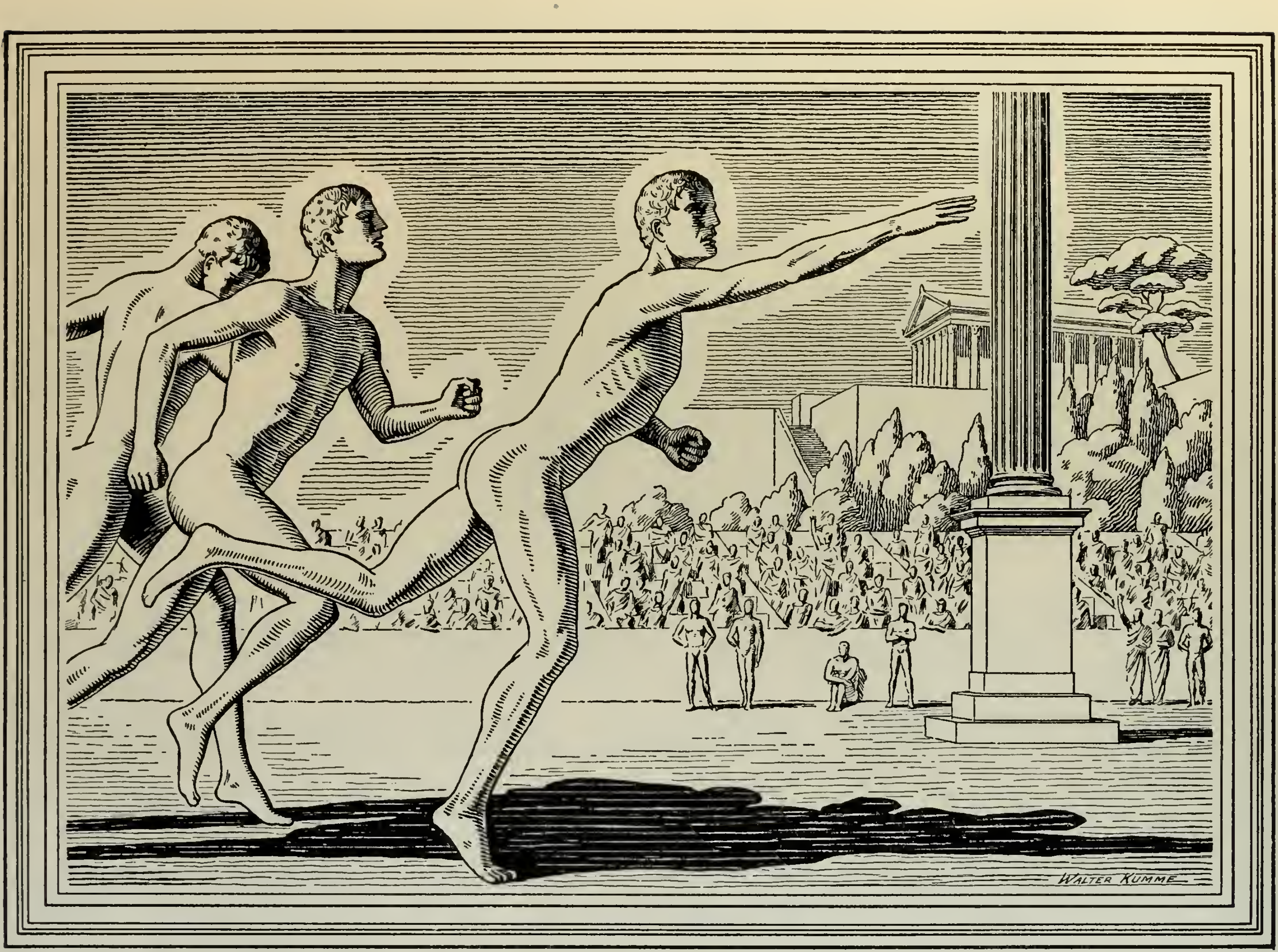


THE SHIP CUPBOARD

DANERSK FURNITURE

ERSKINE-DANFORTH CORPORATION—*Designers and makers of choice furniture*

NEW YORK: 383 MADISON AVENUE CLEVELAND: 11129 EUCLID AVENUE CHICAGO: 620 NORTH MICHIGAN AVENUE
DISTRIBUTORS—BOSTON: 132 NEWBURY STREET—LOS ANGELES: 2869 WEST SEVENTH STREET



KEEP YOUR BUSINESS IN THE RACE

SCIENTIFIC discoveries are coming so fast that it is difficult for the average business man to be sure that his materials and processes are up-to-date; to be sure that his competitor has not gained an advantage by finding some short cut.

Within your lifetime nitrocellulose lacquers and solutions have proved their value in innumerable ways; but as new uses are discovered almost daily, it is possible that you may find a use for them that will answer some of your perplexing problems.

Everyone is familiar with the lovely colors and beautiful finish that nitrocellulose lacquer imparts to automobiles, furniture, walls, woodwork, and hundreds of articles in daily use. It is not so well-known that this lacquer forms a tough, durable, protective film that is waterproof, and can easily be cleaned with soap and water. This protective film may be transparent and invisible as well as decorative.

Nitrocellulose lacquer is noted for its quick drying and ease of application by spray, brush, or dipping; but many do not realize that it can be applied to floor and wall coverings and other decorative materials.

As a coating for artificial leather, a finish for real leather, and as a stiffener for fabrics in box toes, it is widely used. Its possibilities for waterproofing fabrics without stiffening them, for giving a silk-like sheen to dull materials, and as an adhesive, are not so generally understood.

For those who are unfamiliar with nitrocellulose lacquers, as well as those who are now using them, but who may profitably put them to new uses, we have prepared a booklet called, "The Story of Modern Lacquers." It is not technical, but it will tell you many interesting things about lacquers that it may be profitable for you to know. A request for it on your business stationery will bring it to you promptly.

Nitrocellulose lacquers are sold by the paint, varnish and lacquer trade. Our research department will gladly assist in developing lacquers and solutions for new uses or to suit your special requirements.

When informing us of your problems, please name the supplier of finishing materials with whom you prefer to have us work. It will involve no obligation to consult us.

HERCULES POWDER COMPANY

(INCORPORATED)

ROOM 17, CELLULOSE PRODUCTS DEPARTMENT
WILMINGTON, DELAWARE

Ten Common Weaknesses

IN MERCHANDISING, ADVERTISING AND SELLING

That Diminish Profits

MR. FRED. W. SHIBLEY, Vice-President of Bankers Trust Company, author of "The New Way to Net Profits", recently asked us to summarize the major reasons for unsatisfactory sales volume and earnings.

After reviewing typical situations, not only in companies which we have studied in detail, but also in others which we have observed with more than ordinary care, we submitted this list of common weaknesses:

1—INADEQUATE merchandising: neglect of the tasks necessary to incorporate inherent salability in the product.

2—SUPERFICIAL merchandising: handling these problems in an ordinary and obvious manner—due to the use of partial facts or to hasty action.

3—ERRATIC merchandising: deviations from sound practice that interfere with continuity of sales effort, such as faulty timing or the impulsive use of untried intuitive ideas.

4—UNSOUND advertising policies: visionary attempts to do a job that cannot be done within the limits of time and cost.

5—DIFFUSE advertising plans: scattering effort in different directions; failure to achieve tangible results.

6—UNINTERESTING advertisements: either the lack of substance having a personal appeal to the chosen audience, or a dull, lifeless, vague presentation.

7—INSINCERE advertising claims: not only the use of misleading statements or half-truths, but also the failure to be as candid as when talking with friends.

8—UNBALANCED sales policy: the result of not seeing the job as a whole and relating basic factors into a unified program.

9—UNECONOMIC sales plans: schemes used without adjusting the means to the end, in advance or during the operation.

10—INEFFECTIVE management: the absence of wise, human leadership that harmonizes personalities, plans and budgets.

To illustrate each of the ten points, two or three examples were cited,—a total of 27. Some described post-mortem situations; others outlined imminent failures that were later rebuilt into notable successes: still others brought out the positive side, showing how mistakes had been foreseen and avoided. A photostat copy of the report to Mr. Shibley (names deleted) is available to interested executives.

THE EXPERIENCE and ability behind that report are the result of the original policy of our organization, conceived six years ago, which has been worked out with success: The idea of providing a thoroughly *unbiased*, finely *balanced* service in creative advertising that carries its full share of the load of the sales dollar.

While we perform all the functions of an advertising agency, we operate on a new basis which divorces our fee (profit) from variations in the size or allocation of the client's advertising appropriation.

This policy causes us to give as much attention to merchandising as to advertising; in some cases, more. It leads us to take an active interest in the selling problem when the client so desires. It directs our thought to sales forecasting and budgetary control when required.

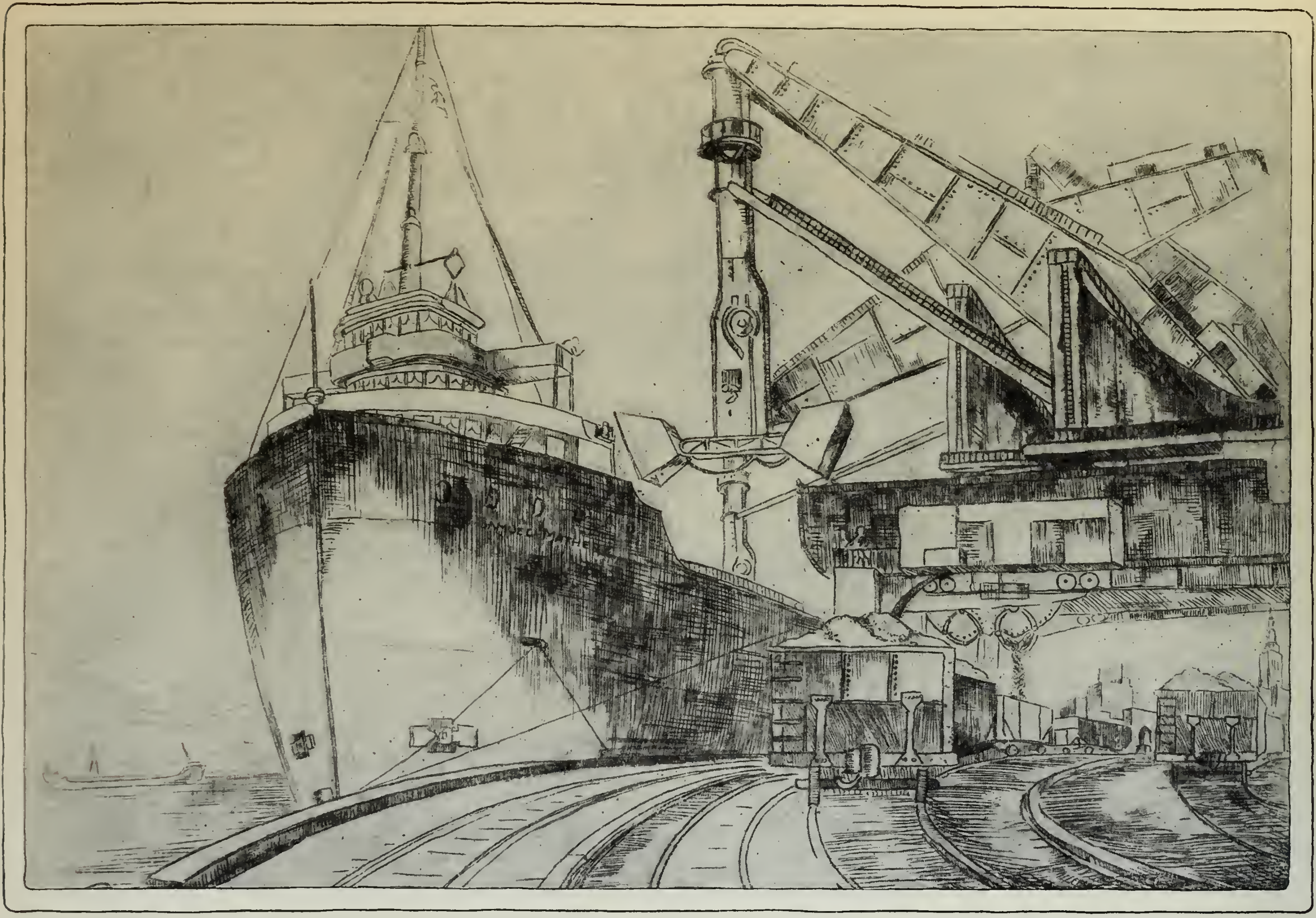
Our organization therefore has identically the same viewpoint as the client,— a sustained interest in the expansion of his volume and his profits on a permanent basis.

COWAN & DENGLER

ADVERTISING • MERCHANDISING • SALES COUNSEL

NEW YORK

IF YOU WANT ABUNDANT RAW MATERIALS



CLEVELAND offers manufacturers substantial savings in the cost of raw and processed materials, enabling them to sell their finished products on a more favorable basis than competitors elsewhere. Closeness to original sources of supply reduces both freight cost and the time factor to an absolute minimum.

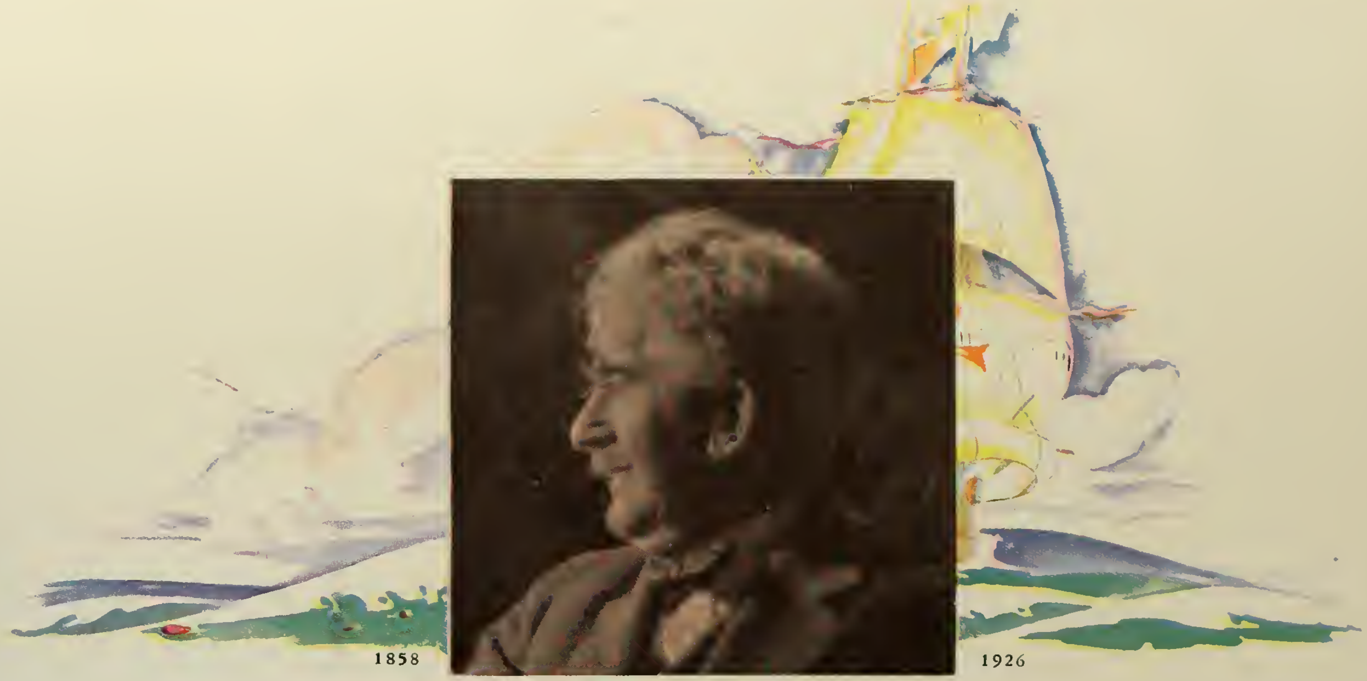
¶ Mountains of ore are constantly being fused into metal —and as constantly replenished by the great ore fleet which, in 1928, brought thirty million tons of iron ore down the lakes to the Cleveland district. Mills and fabricators of metal sold a 1928 output of $256,000,000.

¶ Whether you use basic raw materials—coal, ore, stone, sand, sulphur, oils, wool, rubber, wood and grain; or semi-finished products such as chemicals, paints, varnishes, castings, stampings, steel shapes, food stuffs and piece goods; or finished units like bolts and nuts, axles, motors, blowers, regulators, lubricators and valves—prompt low-cost delivery may be had from immediate business neighbors.

¶ Proximity to raw material is one of ten main factors in selecting a strategic location for a business. ¶ For specific data regarding any or all these factors, write this Bank.

GUARDIAN TRUST COMPANY · CLEVELAND, OHIO

RESOURCES MORE THAN $165,000,000



1858 1926

CHARLES ROSWELL ERWIN

THE PILOT

In this new era of business with Titans come to grips, there is a name that is frequently heard in great counting-rooms and around directors' tables. When millions are being levied for the supremacy of an industry, this name is mentioned with respect. It has been closely identified with the success of fourteen of the largest businesses of their respective kinds in the world. It has helped to rear many another colossus from pygmy ranks and it has aided in wresting powerful crowns from lofty brows.

He had decided to retire before he took the helm of his new ship.

Those clear grey eyes had seen Chicago burn. They had known Yerkes, "Old Hutch," Harriman and Marshall Field.

Dean of his profession, he had for years been president of the greatest advertising agency of his day.

He had weathered the long voyage, brought his vessel safely into port, and looked now to some peace in the twilight of his years.

But an ambitious brown-eyed boy, only a brief time out of college, prevailed on him to take the wheel again.

And so Erwin, Wasey & Company was launched.

Grey eyes looked into brown eyes as the Pilot said he would join in a new advertising business if that business would cater to an old man's whim.

For out of the wisdom of his years he foresaw a new order of things on the business horizon.

He saw advertising as a fine profession with ideals as stern as those of medicine and law.

And the first ideal was service to the client.

A simple man, he defined that now abused word "service" not in cleverness but in terms of solemn responsibility.

The aim of his new enterprise would be not merely to buy and fill publication space for an advertiser, but to bring that advertiser profit.

For the first time advertising plans were to be based on fact, not guesswork.

And thousands of dollars of the new agency's own funds frequently were expended in research to determine a right advertising course, before risking one dollar of the advertiser's money.

A new practice, then; a seeming commercial philanthropy; wiseacres predicted reefs, but the Erwin, Wasey ship sailed on.

Writers such as had never been known to the advertising profession now brought a new standard to the literature of business.

Men who could have made their fame in journalism or the novel wrote advertisements that opened purse-strings that would not yield before.

Artists and illustrators left their studios in the East and West and came to Chicago to illuminate this new advertising that was the talk of the day.

Jaded typographers smiled with hope renewed and lent new beauty to the advertising page.

So outstanding was this new school of advertising that it became a matter of national comment.

And the growth of Erwin, Wasey & Company during the first five years of its history is still a matter of wonder among oldsters of the profession.

After the war the Pilot set his course for Europe. In eleven countries, Erwin, Wasey ideals have since established the greatest American advertising agency business overseas.

New York came next, where the same principles made the same astounding record that had been accomplished in Chicago.

A record distinguished not alone by the growth of the agency but even more conspicuously by the growth of the advertisers it serves.

The Pilot has left for the Long Holiday, but the ship sails on, manned by a crew who joined with him on her maiden voyage.

It is a good crew, with great faith in the simple magic of clear thinking and hard work, *and it has trebled the business left in its care in the last four years.*

Now it brings Erwin, Wasey & Company to the Pacific Coast, where, in Los Angeles, San Francisco and Seattle it purposes to point advertisers for leadership as it has in Chicago, New York and Europe.

It prints this announcement in veneration of the man who held to the principle that in advertising, as in life, the great thing is knowing *where you are going, and how to get there!*

ERWIN, WASEY & COMPANY

Advertising

NEW YORK
CHICAGO

LONDON
SAN FRANCISCO

LOS ANGELES
BERLIN

SEATTLE
PARIS

STOCKHOLM
MILAN

BRUSSELS
COPENHAGEN

ROTTERDAM
ZURICH

HELSINGFORS
BARCELONA

CAUSE

However long the life of any one man, it can be at best but a brief parenthesis in the life of an enduring business.

Goodyear has chosen therefore to found its institutional destiny not upon individual brilliance, but upon principles which succeeding Goodyear generations may uninterruptedly serve.

Foremost of such principles are these: that place is the reward of merit, whether for man or product; and that serviceability to the common good is the true test of policy.

Sustaining every Goodyear principle, and Goodyear leadership as well, is the devotion of a skilled and unified personnel to products of a quality that protect our good name.

P.W. Litchfield

President

GOOD

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Fortune

Number I

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Photographs by Margaret Bourke-White

for March

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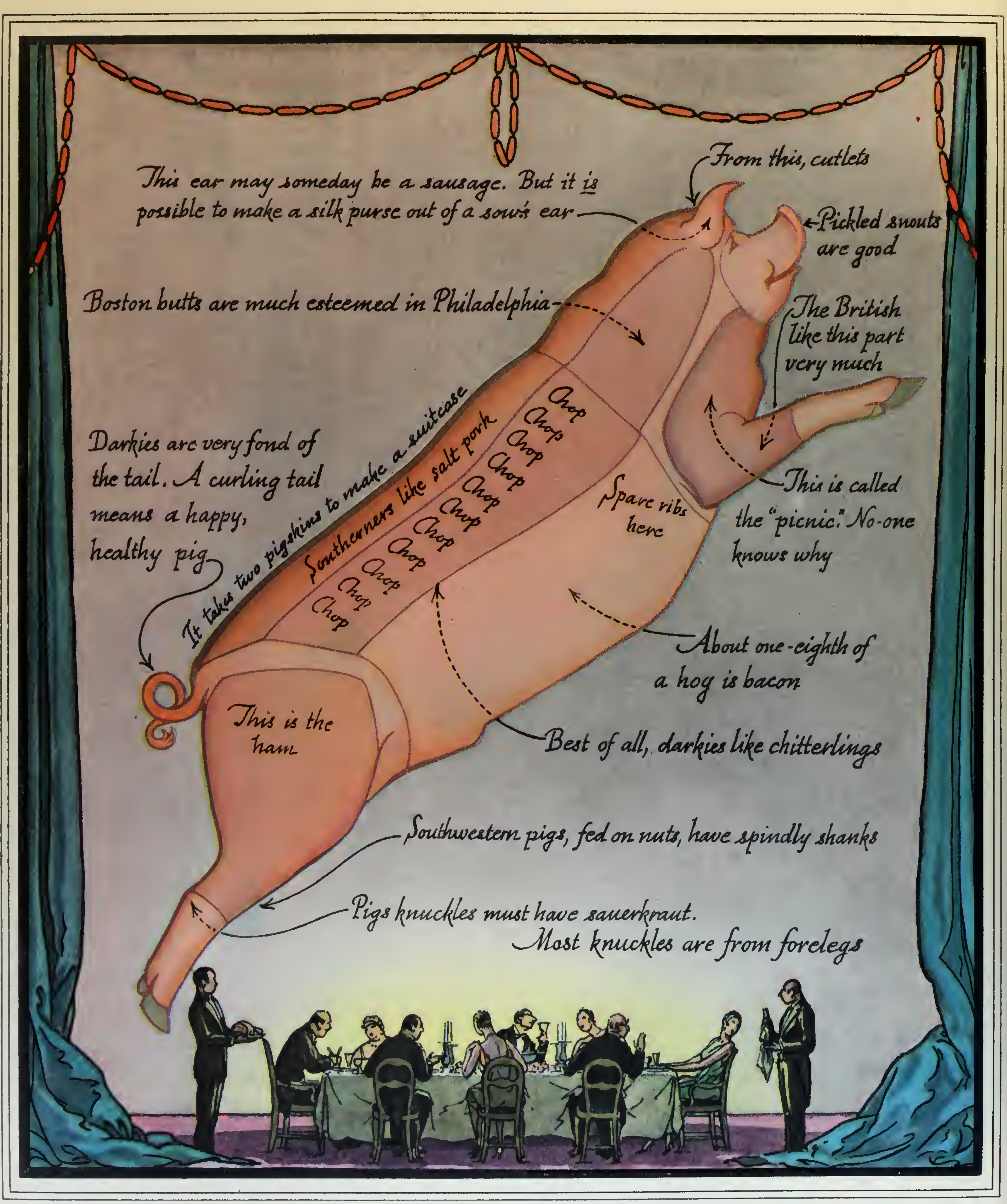
From this, cutlets
This ear may someday be a sausage. But it *is* possible to make a silk purse out of a sow's ear
Pickled snouts are good
Boston butts are much esteemed in Philadelphia
The British like this part very much
Darkies are very fond of the tail. A curling tail means a happy, healthy pig
It takes two pigskins to make a suitcase
Southerners like salt pork
Chop
Chop
Chop
Chop
Chop
Chop
Chop
Chop
Chop
Chop
Chop
Spare ribs here
This is called the "picnic." No-one knows why
About one-eighth of a hog is bacon
This is the ham
Best of all, darkies like chitterlings
Southwestern pigs, fed on nuts, have spindly shanks
Pigs knuckles must have sauerkraut.
Most knuckles are from forelegs

NO ACORN COULD FIND ITS BEARINGS WITHIN A PIG BY STUDYING THIS MAP. NOR COULD A BUTCHER NICELY CARVE, NOR COULD A BIOLOGIST WRITE HIS THESIS. BUT SUCH A MAP—INFINITELY MORE DETAILED—GUIDES THE PACKERS OF PACKINGTOWN AS THEY SLICE INTO PROFITABLE PARTITIONS, 8,000,000 PIGS EACH YEAR.

Tsaa-a Tsaa-a Tsaa-a

The Packer does more for less money than any other industrialist. Herein his business is described with special reference to Pigs and to Swift & Co., which has just entered the billion-dollar class.

SWIFT & COMPANY, butcher for 20,000,000 persons, buys no raw materials. Its cattle, its sheep and its hogs are finished products. Year after year it spends some $500,000,000 for these beautifully assembled mechanisms and proceeds at once to disassemble them. By countless individual acts of destruction, Swift & Company paradoxically increases the value of products which are the result of countless individual acts of creation.

Unlike automobiles and watches, these mechanisms are easier to put together than they are to take apart. Certain kindly laws of nature aid the farmer. The hog, for example, will grow at the rate of about one pound each day and the farmer may confidently expect that his product will be more valuable tomorrow than it is today. Swift & Company deals with natural laws less kindly, if not actually hostile. Fresh meat in uncontrolled temperatures will spoil at a rate much faster than a pound a day. These two chemical manifestations, one of life and one of death, govern most of the economics of the livestock and packing business. As it is harder to deal with deterioration than it is with growth, the packer's problem is the greater.

In meeting it, the packer has gradually created one of the largest industries in America. Standing astride the Mississippi, he reaches with his right hand into the great agricultural states, producing two-thirds of all U. S. livestock, and with his left hand hurls $3,000,000,000 worth of steaks and chops and hams toward the huge population centers of the East. The motorcar maker at Detroit puts no greater value into the automobiles he sends spinning across the earth. Nor does the movie producer at Hollywood. If the figure is too large to be grasped, bring it down to terms of the individual. To each man, woman and child in the United States, some packer distributes each year 170 lbs. of meat and lard[1]. (Numerals refer to explanatory notes in the Appendix.)

Chicago is the industry's center; the stockyards are its major clearing house. Into the yards, in 1928, poured a living stream of 15,500,000 animals. The stream at Omaha was half as long; at Kansas City a little less than half. At 67 markets, the total reached the enormous figure of 93,600,658—a hog, a steer or a sheep for every adult inhabitant of the U. S. and several other countries.

In such tremendous mass is the packer's salvation. Swift & Company in 1928 made a profit of less than ¼ cent a pound on the meat and by-products it bought from the farmer and sold to the public. But it sold 5,500,000,000 such pounds, and was able to net nearly $15,000,000. Compared with its almost $1,000,000,000 gross sales, the profit was ridiculously small, about 1½%. In 1929, its profit (per pound) was about the same, but it pushed its total volume over the $1,000,000,000 mark, joining an extremely select list of gigantic U. S. corporations. Swift, like Armour & Company (which does about the same business), and the smaller Wilson & Company and Cudahy Packing Company must have enormous volume to exist. Together, these four packers dress more than 40% of the country's federally inspected meat; yet their combined net profit in 1928 was less than the profit of Ford, duPont, U. S. Steel or General Motors. This is not a mysterious problem; it is clearly understood and bitterly fought by every intelligent packer. With livestock buyers for 1200 packing plants competing in the U. S. markets, price levels are kept as high as demand allows. And on the other hand, these packers are buying against a consumer's market of two, three or even six months hence. A quarter-cent bargain in November may become a two-cent loss by March.

BURL
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Each packer fights low returns with various weapons. Swift has built up a huge business (more than 70 plants) in dairy produce, eggs and poultry. It is one of the largest distributors of butter in the U. S. These not-entirely-meat-packing activities, together with commercial fertilizers, bring in about $250,000,000 each year, or about one-quarter of the business.

A vast organization keeps this industry in motion. More than 55,000 men and women work for Swift: about one-sixth of them in the pivotal, all-important Chicago Packingtown and stockyards; a fifth in its 400 branch distributing houses spread across the U. S.; a third in its 37 smaller packing plants; the remainder in its $50,000,000 export trade, its 6,000 refrigerator cars operating over more than 600 car routes and its other activities. After volume, motion is the prime necessity of the packing business. To Swift's plants come each year more than 17,000,000 animals. Their killing is the starting gun in a race against time, against the uncertainty of markets and the certainty of eventual deterioration. Waste of time is as great a sin in Swift's Book of Commandments as waste of material. Against both, it wages intricate and interesting war.

The hog is assembled

Roughly measured, the period of usefulness of a hog covers about twelve months. In the first nine, beginning with the farrowing, the farmer prepares the hog for market. The end of this effort of creation is the hog's sale to the packer. In the last three months, beginning with the killing, the packer prepares the hog for the public. This period ends when the last product of the hog is in the hands of the consumer. As one may go behind the hog's birth to its biological beginnings, so one may project its economic life into a chemical future. But for the purpose of studying the hog, this crucial year allows enough scope.

Each period has its own dilemmas.

EARLY MORNING ARRIVALS AT PACKINGTOWN

Of the farmer's troubles, sickness is the most immediate, and marketing time the most baffling. So steadily does the farmer consider the price he will get for his hogs that every four years he thinks himself out of many millions of dollars. In 1922, the farmer could sell 16 bushels of corn for only $9, which was the price of 100 lbs. of hog. Pondering this, he decided that in 1923 and 1924 he would not sell his corn, but would feed it to his hogs and sell the hogs. Thus by 1924, the number of hogs slaughtered (under federal inspection) had jumped from 43,000,000 to 53,000,000. The price of 100 lbs. of hog fell from $9 to a little over $8, and the 16 bushels of corn, which in 1922 were worth $9, in 1924 were worth nearly $16.

Again the farmer pondered. Apparently his idea had been wrong. It had become more profitable to sell corn as corn than to sell corn as hogs. Reversing his economics, he so reduced the hog supply that in 1926 the hog prices went to $12, and the value of his 16 bushels of corn dropped to $12.

Added to this large cyclical problem are the seasonal ups and downs of hog marketing, with prices rising in the off months and falling when the winter runs are heaviest. There is even a day-by-day fluctuation in the Chicago market, a fluctuation which the packers and thinking livestock producers are working to eliminate. Normal December receipts in Chicago average between 10,000 and 60,000 hogs each day. Yet one Monday, December 15, 1924, the packers were appalled to find no less than 122,749 hogs jamming the stockyard pens. In one day the price fell $1.75. Now the farmer gets market reports four times a day by radio. Quickly figuring the comparative values of corn and hogs, he decides whether to ship at once (by train or truck) or hold for a better market. If too many become frightened on a falling market, the result precisely parallels conditions on the New York Stock Exchange last October.

Here in the hog alleys is as keen trading as may be found in the world, conducted almost without the aid of speech. There is no lack of noise. Into the pens strides Fred Young, Swift's veteran buyer who looks like John W. Davis. He pokes the hogs with his stick and says "Tsa-a". Everybody pokes hogs with stick and says "Tsa-a, Tsa-a". The hogs grunt. Mr. Young judges. Then he comes out to where the commission firm's salesman is standing. Young looks at him, waiting for a price. The seller utters one word: "Ten". Fred Young moves rapidly on. He is not ready to pay $9.10 per cwt. for hogs weighing 180 lbs. His price, set by wise Sven Lund back in the general offices, is $8.90, based on the outlook for demand for pork and the supply of hogs.

Often Mr. Young spends much time, after the market opens, in dickering before he makes any purchases. The buyer for Miller & Hart (Berkshire brand) may pay the asked $9.10 for the load. Smaller packers and order buyers frequently set the early market. Fred Young waits, telephoning the market trend back to the wise Sven, who is in touch with all the principal markets. Many times he yields to a rising market, pays $9.10 or even $9.20, because the reverse of his judgment is often true. A nod from Young, a nod from the seller, closes the deal. There are never misunderstandings. Each day the packers pay in cash; Swift's *daily* average for livestock for the year is about $1,250,000.

Thus ends the period of creation. The farmer's work is done. The hog, completely assembled, is in Packingtown.

The stockyards

Almost everyone has seen a farm; almost everyone feels himself reasonably familiar with it. Each year 200,000 visitors are guided through the visitors' route at Swift & Company plants; not a dozen of them leave with a thorough understanding of the Chicago stockyards and Packingtown. Conceive, if you will, a square mile (640 acres) of reclaimed swamp sliced out of the middle of a city of 3,500,000 persons. Bound it on the east and northeast by the black belt, on the north by a factory district [Wrigley's, Standard Sanitary, Starck

Piano Co., Henry Bosch Co. (wall paper), Certain-Teed Products Co. (roofing), Chicago Portrait Co., etc.], on the west by the foreign sections, on the south by a modern and prosperous shopping center. Within are some 50,000 men and women, absorbed in destruction. They are of all castes, all races. Once the majority were Irish; now the Irish have gone and in their places have come Slavs and blacks. Watching them on the killing floors, in the dressing plants, one notices their splendid physiques, their clever hands. Or perhaps the knives are more impressive than the hands which guide them. Hundreds and thousands of clean, flashing knives.

IN THE ALLEYS, WAITING TO BE JUDGED

The eastern third of the yards belongs to the livestock men. Here they bring or send their hogs and cattle, riding up and down the alleys on fine horses to dicker with the buyers. The fencing about the pens gives the effect, from above, of a gigantic grey checkerboard. Here and there, over the pens, long grey arms point to the west. These are viaducts for men and for animals, routes to offices and to killing houses. From time to time they tremble and roar under a drive of steers. Intensely proud of their profession are these men. They trace their Scotch or English ancestry back through generations of cattlemen. In the old English dining-room of the Saddle & Sirloin Club, they are watched by the portraits of their fathers' fathers.

Only the most important livestock men ever penetrate farther west than the end of the alleys. Beyond, and in the central third of the stockyards, are the offices of Swift, of Armour, of Morris (Armour-owned), of smaller packers, Roberts & Oake, Miller & Hart and others. Here, too, are the visitor's routes through killing houses and model kitchens, through laboratories and community markets. To the east is the odor of the barnyard; here in the Swift general office building the air is washed and no windows are open. The precaution is wise, although in this central portion there are many sweet-smelling places. The smoke-room, where row upon row of Premium hams are perfumed with the smoke of wood fires. A tiny room in the sausage plant, where spices are mixed for flavoring. The huge tanks of cottonseed oil in the refinery, rich and earthy and edible. All of them fine scents, grateful after the machine-odors of any plant.

Here, too, is the locus of the Brothers Swift. Once there were Armours and Morrises as well as Swifts, but with the sale of Morris to Armour and the reorganization of Armour, the other old packing families have almost disappeared. In the far northwest corner of the yards, almost outside the gates, the Wilsons still run the business bought in 1916. But five sons of the late Gustavus Franklin Swift are now the reigning aristocrats of Packingtown, and a sixth functions in Boston.

Rich as they have become (each could retire whenever he liked), splendid as are their homes, these Swifts are not out of place in the yards. Their tradition is no less compelling than the tradition of the cattlemen or the tradition of the clever knives. Very close are the Swifts to their business. Only one, Harold, has any major outside interest. He is president of the Board of Trustees of the University of Chicago. It was Harold who went to the Yale Law School to bring 31-year-old Dean Robert Hutchins to become Chicago U.'s prodigy president. It was of dark, grave Harold that British Sir Josiah Stamp once said: "How extraordinary! It is only in America that a butcher could become a university head." He was the only Swift to go to college. He is the only Swift bachelor.

Harold is distinguishable among the Swifts by the extent and importance of his activities outside the yards. Within the yards, G. F., named for the Founding Father of the Swifts, is equally distinguishable. Boss of the plant's operations, he is the family's most practical meatpacker, a good judge of hogs.

Louis F., President of Swift & Co., is the eldest son of the Founding Father and Edward F., the second son. As a boy Louis could buy, weigh, kill and dress a steer. Now he is less the meatpacker than he is the executive, but he is still a hard-working, simple-living business man. Outside his office is a stand-up desk where Louis transacts much of his business. Gladly he leaves university affairs to Harold, social affairs to the suave Charles H., husband of Claire Dux, an excellent soprano.

The early beginnings of the Swifts were on Cape Cod, and years ago another brother, George H., feeling the insistent tug of New England, refounded a Swift home in Boston. Here he handles many Eastern Swift activities, finding time also to be chairman of the board of National Leather, a onetime Swift subsidiary, which now attends to its own business.

The company is very conscious of its Swifts, counts them as potent weapons in its unending duel with Armour & Co., nearly bereft of Armours. That a second generation should still be in packinghouse shirtsleeves fills the company with pride; that a third generation comes on (although not in great force) makes the cup of Swift joy overflow. Young Alden, son of Louis, is the third-generation representative in the yards. His departments include beef, purchasing, transportation and by-products, a large assignment, but Alden has ability. In Denver, head of the Swift plant, is L. F. Jr., the other third-generation Swift who carries on.

The Swifts breathe washed air; surrounding them are white mahogany offices, the Swift radio station, the kitchens where each day pound cakes are baked with new, Swift-devised shortenings, the refrigerators filled with pretty, packaged chops and cuts, for all the world like a confectioner's window. This is the silk-stocking district of the yards. Even the killing floor, for all its blood and guts, has somewhat the air of being on parade.

Only a few steps westward and the parade comes to an abrupt end. Few visitors venture far into the western part of the plants; they would not be comfortable there. On one hand rise the plants of a company with a euphonious name (Darling & Company) and the malodorous business of rendering meat trimmings from butcher shops.

Across the narrow alley are Swift's by-product plants. Heaped outside the bone house are the heads of cattle, in awful pile; inside are grinders which belch forth clouds of dust. The odor is not pleasant. Swift supplies the workmen here with filter masks. Some use them and some do not. It is wiser to use them.

Thus the Packingtown in which the farmer's finished product finds itself.

The hog is disassembled

The major adjustment which the hog makes as it moves to the last quarter of its year is of course the change from life to death. This is the only adjustment which can conceivably be of concern to the hog, and it is a curious thing that it should be of such little concern to Swift & Company. If killing is the chief function of a butcher, then the Swifts are not butchers. Exactly 25 minutes elapse between the time the live hog reaches the killing floor and the time the dressed carcass goes to the cooler. By the left hind foot he is hoisted athwart a giant wheel, then delivered to a conveyor from which he hangs, squealing, head downward. A mammoth being with a spear-like knife makes a quick, deft thrust at the hog's throat. The adjustment is made.[2]

Beautifully certain are the ministrations of the killing room to the rows of carcasses which were hogs. An incredibly intricate nest of blunt knives scrapes every hair from the hog's skin; nearby stand government inspectors, slicing the neck-glands, to search for tiny white spots which are tuberculosis. Off comes the head; it is put to one side. One deft ripping motion and the inside of the carcass is as clean as the outside. A twist of giant tweezers and the toenail clatters to the floor. Now the procession moves through a bath of fire to singe off the last of the hair, a bath of water to cool. The rhythmic rise and fall of a cleaver rends the backbone. On and on come the carcasses, perhaps 20,000 of them, a fat pink parade curling through blades of steel.

From the killing floor the carcass moves to the cooler for twenty-four hours, then to the floors where men and machines carve it into dollars and cents. Here is a mechanical saw which grinds through the shoulder; there is a draw knife like a curved adz which scoops out the loin. Hundreds of white-sleeved arms swing back and forth. Hundreds of funnels gulp the morsels the knives flip aside. Some gulp lean trimmings; these will make sausage. Some gulp fats; these will make lard. Down one chute go the hams, trimmed to within ⅛-inch of standardization; down another pour shoulders. To the waiting refrigerator cars is rushed the fresh meat, ready to travel to a branch house in Seattle or Atlanta. But the hams and the bacon must go to the curing cellars, there to remain from 30 to 90 days—and the toenails, the hair, the fats, the lips, still have long weeks to wait before their processing is complete, before the hog has been perfectly destroyed.

In this gradual dissolution there is no accident, no happenstance. When the live 250-lb. hog begins his run across the viaduct to the killing-floor, he is already divided and subdivided as exactly as a suburban real estate development. Swift knows that when the knives are through with him, there will remain:

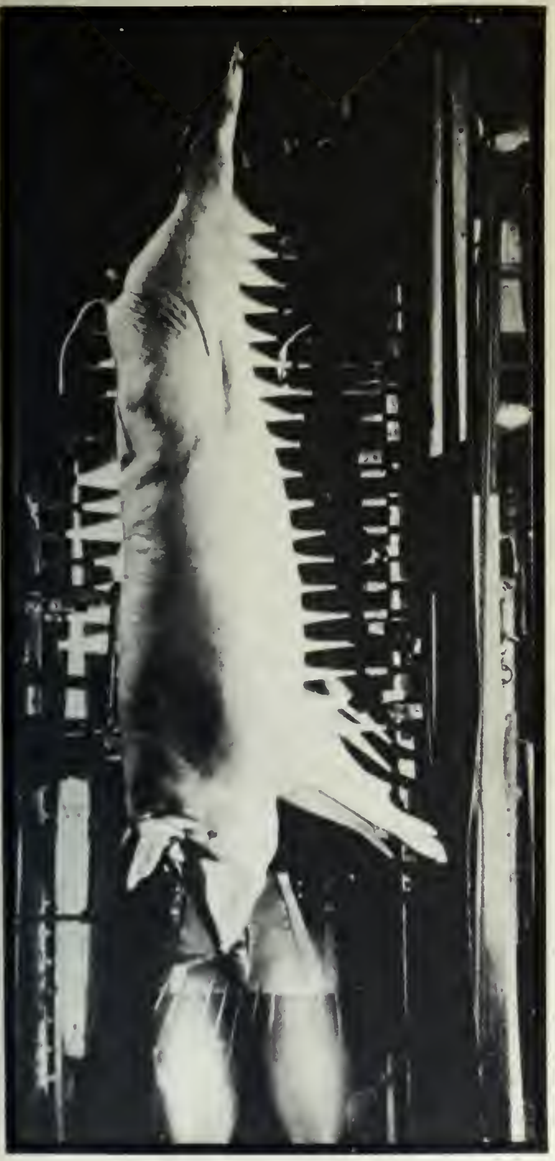
HEADS DOWNWARD, IN GRAVE PROCESSION ACROSS THE KILLING FLOOR, 20,000 HOGS ARE ALWAYS MOVING

Of fresh meat (loins, Boston Butts, spare ribs)	37.50	lbs.
Of hams (to be cured)	32.50	"
Of bacon (to be cured)	29.37	"
Of fat backs (salted)	23.75	"
Of lard	22.50	"
Of picnics (smoked shoulders)	12.50	"
Of clear plates	6.87	"
Of sausage (about 1/50 part of the hog live weight in the form of lean trimmings)	5.63	"
Of jowl butts	5.63	"
Of various edible products such as feet, necks, tails (popular with negroes), cheek and head meat, ears, snouts (often pickled) and lips	7.50	lbs.
Of edible by-products such as kidneys, stomach-linings (sold to pepsin makers), gullet and giblet meat	5.62	"
	189.37	lbs.
Shrinkage accounts for	51.25	"
	240.62	lbs.

There still remain 9.38 lbs. of hog to be use-

FROM LIVE HOG TO DRESSED CARCASS—25 MINUTES

fully destroyed. There are hides (to be tanned into pigskin), hair (to upholstery), bits of skin and sinew (to glue), grease (to lubricants), blood (to stock foods), bone (to bone-handles, buttons, bone-dust). In the by-products houses are whirling cylinders of blood, soon to be dried to dust. Another room is carpeted with thousands of glittering white shin-bones, forming fantastic geometric patterns. Once they were changed to Mah-Jongg sets; now they become knife-handles and buttons. In the glue house, fragments of gristle swim about in open tanks; their liquor will be condensed, then dried, then ground to the inevitable dust: dark brown cones of powdered glue. Fragments of fat are rendered for lubricants (not lard) or distilled for grease. Even the water from the tanks is partially evaporated and its grease skimmed off, then evaporated again to make food for animals.


EACH HOG IS SINGED BY CLEANSING JETS OF FLAME

But even after these by-products have been isolated from the 9.38 lbs. of residue, there yet remains an ultimate remnant. From this Swift prepares, in giant cooking vats in the animal-food house, a brew which it calls digester tankage. Its ingredients are fragments of skulls, toes, hair, knuckles, and the ultimate remainder of every previous process in the vast Swift plant. Once these remnants went to the fertilizer tanks; thus the brew had its christening. Now they are dried and ground. In a misty storeroom are piled 1500 tons of this tankage, macabre mountains of meal. Its protein content is fixed by law at 60%; it makes good stock food. Here is the final achievement of the Swift disassembly, the visible sign of the shopworn adage that the packers use every part of the hog but the squeal.[3] Weirdly incongruous are the heaped-up remnants which roll up to the by-products plants in bright red wagons; when they come out, they have merged their identities in useful dust, the last product of destruction.

Swift's horror of waste has produced many curious deals in Packingtown. One of the most valuable to mankind has been the supplying of pork glands for insulin and sheep glands for adrenalin. One of the most curious is the sale each year of several pounds of gall stones, collected from the killing rooms. These are bought, for well over $100 a pound, by mysterious Orientals who do not divulge their purpose. Swift supposes, but does not know, that they are used as charms or for medicines.

The great problem of physical waste Swift has mastered. When the Founding Father strode along that evil-smelling stream known as Bubbly Creek, he would stop at the openings of the Swift sewers. If he saw any fat coming out, he knew there was waste in the packinghouse. Back he stormed and someone smarted. No fat issues from Swift's sewers today. That leakage has been stopped.

The next problem is harder to solve, and Swift has not yet conquered it. In the chemical laboratories, in an atmosphere of test tubes and constant-temperature-rooms lies the key to Swift's immediate manufacturing problem. Having eliminated the waste in the product itself, the remaining step fairly shrieks itself through Packingtown:

Eliminate the waste in Time.

Nine months will produce an 180-lb. hog; 25 minutes will kill it and send the carcass to the cooler; 24 hours will chill the meat; 15 minutes will see it cut into its hams, its shoulders, its bellies (bacons) and its loins.

But in the curing process, in the barrels of pickle (salt, sugar and nitrate), the hams and the bacon remain for from 30 to 90 days. And some dry (or summer) sausage must hang in the drying rooms for four months before government inspectors are satisfied that no suspicion of trichina[4] remains. By the time these have been shipped to branch houses, distributed to dealers and sold to the consumer, the hog's year is up and the period of destruction may be said to be complete. Such enormous stocks as Swift has always in storage obviously complicate its marketing situation; the packer must buy his supply in November for a conjectural demand in March. Now the Swift laboratories experiment ceaselessly with quick cures. The preservation question they have mastered; they can cure in comparatively few hours. Not yet have they found a way to duplicate the flavor of the slow cure.

GIANT MEN AND SHARP KNIVES SPEED THE DISASSEMBLY

TRIMMING THE BELLIES WHICH WILL BE BACON

Swift's future

In these laboratories are many odds and ends which help paint the Swift picture. Here is a room devoted to experiments with gelatin and motion picture films. Here is another where scientists are improving the dry rendering process. Already this process (which substitutes continuous rendering by means of steam-heated coils for rendering in steam vats, with the consequent escape of odors) has made the yards a more habitable place. Swift's scientists would do more if they could, would make the Chicago plant as sanitary as the model exhibit at Toronto. But the buildings are old and there is the ever-present problem of Swift's neighbors. Swift might clean house, but would the small packers to the west? The issue rests.

These laboratories are now the scene of experiments which may have a profound effect on Swift's future. With the tremendous effort to perfect the frozen meat process, the fundamental principles of which were established by Swift in 1903 (see page 62), Swift makes what is probably the last and most important effort to evolve a distributing machine equal to the "disassembly" plant at Chicago.

From a production standpoint, further Swift progress would be almost an improvement upon perfection. Yet Swift & Co. itself does not at all contemplate a process of marking time, or of resting upon its reasonably assured net income of $15,000,000 per annum. The greatest (and most difficult) Swift step forward lies not in manufacture but in distribution —in the revoking of the famous Consent Decree to which Swift and other large packers consented in 1920 and which has since become the outstanding obstacle of packing house expansion.

The Consent Decree was arrived at in settlement of a threatened government suit against Swift, Armour, Morris, Cudahy and Wilson, then and now (except that Armour has absorbed Morris) the largest units in the packing industry. Facing anti-trust proceedings, the packers agreed not to handle such so-called *unrelated* lines as the packaging of canned fruits and vegetables; agreed also not to enter the retail business. Today however, the situation is very different in two vital respects. In the first place, smaller packers, not parties to or bound by the Consent Decree, have gone into the retail business, and in the second place, the retailer, in the shape of the great chain store systems, has gone into the packing business, one chain now operating two packing plants and a large sausage factory. So, seeing other packers retailing, and seeing retailers packing, Swift *et al.* consider the Consent Decree, under present conditions, unfair and discriminatory, and attack it often.

Meanwhile, however, nothing but an unimaginable outbreak of vegetarianism can interfere with Swift's basic structure and basic prosperity. While trade commissions may investigate, while the new and cultural Chicago may deprecate and disown the square mile of stockyards, Swift remains secure in its billion dollars business, in its income of millions piled up from profits of one quarter of a cent per pound of meat. It has 57,000 stockholders, (including 25% of its employees) and last month it announced a four for one stock split to give more investors (and employees) an opportunity to hold its securities. As to not being a speculative favorite, that position has its alleviations, as evidenced by the fact that there was a relatively small spread between Swifts' 1929 high (149⅞) and low (121).

Thus Swift & Co., butcher for 20,000,000 meat-eaters. When G. F. Swift, that brusque, sardonic Yankee, first came from Cape Cod to dress meat at the source of supply, he could not have visioned so tremendous a service. Volume has made it possible, and ice, and advertising. Man, no longer can hunt his quarry and bring home his kill, but he is still carnivorous. Swift & Co., with the knives to cut meat, the ice to preserve it, the cars to transport it, faces the future with small misgivings. For it is the modern minister to a timeless and primeval want.

SWIFT PREMIUM

ROWS OF HAMS IN THE FRAGRANT, SMOKY, CURING-ROOM

IN MAMMOTH DUST-HEAPS ENDS THE PIG. COMPLETELY DISASSEMBLED, HIS REMAINS GROUND TO PUNGENT DUST, HE FULFILS HIS FINAL FUNCTION AS GOOD FOOD FOR ANIMALS. IN THIS SWIFT STOREROOM ARE 1500 TONS OF RICH PIG-DUST, MACABRE MOUNTAINS OF MEAL.

BURLINGA
PUBLIC
LIB.

Swift's Jersey
Fresh Pork Chops
Swift's P Club
Swift Port

PACKAGED STEAKS, CHOPS, SHOULDER, LAMB STEW, THREATEN THE LOCAL BUTCHER'S FUTURE

A Second Ice Age and its Priestess of Antisepsis

NO DISCOVERY has had an effect upon the geography of the race comparable to that of the modern preservation of the stuffs of food. It has piled people by the millions, one on top of the other, a thousand miles from the nearest source of beef. It has loaded a small island in the north Atlantic with a population greater than England's in Shakespeare's time. It has enabled an army larger than the nations of past time to fight for years in a stripped land. Conversely it permits a sheep grower in the Antipodes to sell his mutton half way round the world and a fruit grower in Oregon to ship his peaches to a year from the following May. It levels out bumper crops, cancels famine and produces metropolitan civilization. Chicago (it is no reflection on the new-made land to say so) stands upon a billion cans. So does New York. And London. And Berlin.

Or, more exactly, on an acreage of cans and ice. Canning was attempted during the Napoleonic Wars, accomplished in the 1840's and commercially perfected in the next decade. But canning alone would not support the weight. Canning has no quick answer to the problem of raw food. Potted beef and tinned tongue build no cities. It was not until refrigerating plants rolled out on rails to link the slaughter houses with the city shops and carry cod to Texas that the change took place. Ours is as much a second ice age as an age of steel. Forget the art of simulating ice, or making it, or keeping it, and the steel will not stand long.

Unlike other innovations with vast social consequences, the first modern use of refrigeration in the preservation of food involved no basic scientific revelation. It is a matter of very ancient human knowledge that a fat goose, frozen and hung in winter out of the dog's reach, will be good to eat. Artificial cold merely carried the chance effects of winter round the year and into climates that had never known them; and the skill of the engineers was expended in the perfection of the means. They were concerned with ice-making machinery, cold storage plants, insulation, refrigerating cars. The problem was to keep your meat or fish at a temperature which would suspend bacterial action and deliver it to the retailer in that condition. There was no need for an original biologist.

What has happened in the last decade or more is that the nature of the problem has changed. Metropolitan Civilization, made possible by the commercial preservation of foods, has produced the Metropolitan Purchaser. The Metropolitan Purchaser lives in a small apartment rather than a large house. She has no children, or two, instead of four or seven. She has a telephone on her kitchen wall and she orders food from day to day in small quantities as she needs it. She has ideas about bacteria, a religion of antisepsis and no place to put a quarter of beef. She will not accept crackers out of a barrel nor pickles out of a tub, but buys both in sealed containers with the trade mark of a reputable manufacturer stamped on the lid. If she still goes to the butcher shop or the fish market to buy a hand-cut morsel from an anonymous carcass she does so because she has no alternative or because she is accustomed to the method; not from choice.

The problem, that is to say, has become primarily a problem of selling by retail, and only incidentally a problem of preservation. How can the dealer in perishable meat and fish imitate the dealer in flour, turn out a trade-marked, packaged, factory product of uniform value and participate in the profits of such a market?

[*Continued on page 120*]

Banking, Group and Branch

A 10,000-word survey of the chief current problem in American finance.

AND who, a certain lawyer asked, is my neighbor? To him the Teacher told a story of a man who, between Jerusalem to Jericho, fell among thieves and was rescued by a Samaritan.

Mr. Henry M. Dawes, younger brother of the Ambassador and onetime U. S. Comptroller of the Currency, is a stoutly articulate opponent of intercommunity branch banking. The possibility that some New York bank may some day have branches in 1,000 cities he views with an alarm almost Spenglerian in its pessimism. But he does not at all object to the National City Bank having 37 branches in New York City. Why? Because "the customer of the branch can still maintain contact with the owner and the controlling executives of the institution, who are his friends and neighbors".

The spectacle of an East Side Greek restaurateur maintaining contact with Mr. Percy A. Rockefeller, one of the largest stockholders of National City, or of a Brooklyn longshoreman in neighborly antics with Mr. Charles E. Mitchell is calculated to paralyze with mirth almost any customer of the said bank, and, indeed, even Mr. Dawes could not gravely contemplate such sights. And yet, Mr. Dawes did not inadvertently utter an absurdity. What he said is probably related to a truth the profundity of which staggers our inadequate imaginations and which he himself but faintly grasps. Who is your neighbor? Are we or aren't we all?

The Secretary of the Treasury has officially notified the Congress of the United States that "the time has come" to do something (first, an investigation) about the increase of branch banking and group banking throughout the U. S. The Comptroller of the Currency has more sharply defined the issue. Thus begins one of the most verbally violent conflicts in recent history. Rarely is the subject mentioned without use of the word "revolutionary". "Seismic revolution" is the phrase of the Economic Policy Commission of the American Bankers Association. In Congress, the speeches began with this sonorous period from the Hon. T. Alan Goldsborough: "The control of credit means the control of business, the control of politics, the control of schools, and the control of churches". What looks to the ignorant like a harmless question of banking technic easily becomes an awful portent of disaster to man's very soul. It appears that there is nothing which is not pertinent to this subject. In reviewing it we shall raise only the most necessary questions; but they will be many. Of the many, the greatest is this: who is my neighbor? All peoples have asked this question and made their answer their history.

Branch Banking

When fire and earthquake wrecked San Francisco in 1906, Amadeo Peter Giannini, a tall, broad-shouldered bright-eyed Italian of 36, rushed to the Bank of Italy, started by him two years before. As flames reached the building, he removed its gold and securities, carted them to safety. When order was restored the Bank of Italy was doing business in the home of Dr. Attilio H. Giannini, Amadeo's brother. Special receiving tellers' desks had been set up along the waterfront to handle the money of the produce men. Thus disaster-born, makeshift, unofficial, were the first branches of the Bank of Italy. But in creating confidence and admiration for the produce dealer who had suddenly turned banker, they proved more profitable than his Bank of Italy's 300 subsequent branches. To Banker Giannini the incident brought a realization that diversification in banking as in everything else can bring safety. It was the beginning of a career which has been an irritant to American finance ever since.

Three years later the Bank of Italy opened its first official branch, buying the Commercial & Savings Bank of San Jose, then a town of 28,900, about 50 miles from San Francisco. To California this was not the first evidence of branch banking. Before the Civil War two Canadian banks had branches in the State, and some of the pioneer banks had established branches. But this was the first modern, aggressive step toward the development of a banking plan that within 20 years was to make the branch at San Jose only one of some 300 Bank of Italy branches, that was to change the Bank of Italy's capitalization from $150,000 to $50,000,000, that was to enable Giannini to head a giant holding corporation controlling resources estimated at $2,000,000,000.

Enemies of Giannini explain this growth by maintaining that Giannini is merely a banking manipulator, making bad use of California's branch-permitting laws, drawing on the faith of Italians; his adherents claim he is a man who has led banking to its natural, evolutionized form—a form hindered elsewhere by unsound anti-branch legislation. The arguments of both will be discussed later, are significant here only

This article is an interesting and comprehensive analysis of the present trend in banking developments in this country. In view of the fundamental economic situation which has given impetus to the organization of group banking systems and to the growth in branch banking, it is desirable that these developments be carefully studied, not only by Government officials charged with the responsibility for possible legislative enactments but by the banking and business world.

Hasty legislation, either to liberalize or to constrict limitations now in effect, should be avoided; but the time has come when it would seem wise to undertake a thorough study of the situation with a view to determining the soundness of the present day tendencies and more particularly the limits of the economic areas within which branch banking may be advantageously permitted.

It is appropriate that the first issue of this new magazine of business should devote so much space to a study of this very important question.

A. W. MELLON
Secretary of the Treasury

to illustrate that, good or bad, branch banking developed early in California where the prejudice of locality failed before the pride of Californians in their state and the pride of Giannini's first supporters in their race.

Slow at first was the Bank of Italy's expansion. But in 1920 financiers who had long scoffed at Giannini were advocating that he be restrained. The Anti-interests elected a governor who, assisted by the California League of Independent Bankers, did his best to stop Giannini. Public rumors had it that this emigrant's son was backed by the Pope, had a branch in the Vatican, was a monopolist, had created a Great California Bubble, explosion of which would wreck the state.

Against these opponents Giannini fought by entering politics himself, which he had done before in San Francisco municipal elections. Fortunately for his cause, he had always believed in wide stock ownership, thus had many scattered supporters, was able to elect a "friendly" governor. Furthermore he himself refused to become very rich,—"worth less than a million"—which to this day bewilders slicker financiers.

When it was seen that legislation could not block the Bank of Italy, its opponents who had already tried a few branches went vigorously into the movement, especially in Southern California. In 1928 the famed Fleishhacker Brothers ("Herb" & "Mort") formed the Anglo National group of banks. Another combatant appeared only last August when the Goldman Sachs Trading Corp. of New York purchased the American Co., controlling the American Trust Co. which has long angled for San Francisco's distinguished Crocker banks.

But it was too late to combat the Bank of Italy with its own methods. Its branches were state-wide, had gone through a terrifically rapid expansion before entering the National Banking system in 1927. The Bank had long passed the condition where it depended upon Italian support. In June 1929 it had 1,500,000 customers, more than 14 times the estimated Italian population of California. Its management became coördinated and systematized. Its early policies, which had been ridiculed, began to yield returns. One of these policies was a ready access to executives and a general lack of austerity. Thus when the Bank reached a tremendous size, it was able to maintain the personal element demanded by the small customer. Another was the "school savings" plan by which children were made depositors. Conservative bankers who had laughed at the idea realized suddenly that the plan had made the Bank of Italy harder to combat, for statistics showed that practically all of these accounts were maintained and brought in others.

So in a field free for branch banking, the Bank of Italy became the dominant bank with branches, although many big commercial accounts remained in the hands of such California bankers as the Fleishhackers and Crocker. This at first could have been explained as a California phenomenon, made possible by the feeling of unity present in the state, plus lax regulations. But in 1928 Giannini had made a move that startled American bankers. He bought the Bank of America of New York, an old institution (founded in 1812, having as its first president Oliver Wolcott, son and namesake of the Declaration of Independence signer). Then he grouped all interests (including the aggressive firm of Blair & Co. which soon merged with him) into the titanic Transamerica Corp.

Staunch in his faith that branch banking would eventually become nation-wide, Mr. Giannini announced last September that the Transamerica Corp. would seek to have 500,000 scattered stockholders, boosters for future Giannini banks in every state.

In Giannini then is branch banking personified. It is his conception of banking, his open discussion of it, that has shaken the "traditional" conception of banking, has caused legislators, Cabinet members, Presidents, to try to visualize what it means beyond the mere mechanics of the system. The best U.S. example of a working intercommunity branch bank is his Bank of Italy, serving agricultural districts, mining towns, industrial cities, fishing villages. Upon Giannini's premise that branch banking is natural, beneficial, profitable, turns the future of American banking and, we shall see, a criticism of American civilization.

Group Banking

Not the least amazing aspect of the recent, and especially of last year's startling developments in American banking is that the inspiration has not come from New York, but has been as far from New York as possible. His entrance into New York was only a climax to Mr. Giannini's drama which, like an Aeschylean discussion of the gods, troubles the philosophy of a nation.

Most contemporary of phenomena is, however, not branch banking but group banking; not the Bank of Italy but Transamerica Corp. And the classic theatre of group banking is neither New York nor California, but Minnesota and the contiguous states which constitute the Ninth Federal Reserve District.

On Jan. 8, 1929, Edward Williams Decker, President of the Northwestern National Bank of Minneapolis, announced the organization of the Northwest Bancorporation. He did not coin the hybrid word; that had been originated by a smart fellow named Andrew Price who christened the Marine Bancorporation of Seattle in September 1927. The word has been adopted far and wide although there is still some difficulty in making yokels say Ban-corporation instead of Banc-corporation. The word is good since it contains that magic derivative of the Italian *banca* and yet does not fall foul of the law which dislikes to hear anyone call himself a bank if he is not a bank. And the Northwest Bancorporation is not a bank. It is a corporation essentially similar to the Wrigley Chewing Gum Co. or Standard Brands, Inc. It is called a "holding company"—which almost any corporation could call itself if it so desired. It differs, however, from the Wrigley Co. in that in asking for a charter, it remembered to tell the Delaware Secretary of State that it particularly desired to acquire the stock of banks. Which it right forcefully set about to do.

It began business with an authorized (not actual) capital of $300,000,000, almost three times greater than the capital of the largest bank in the U.S. This was divided into 6,000,000 shares of $50 par value. By Nov. 1, 1929, it had issued $71,100,000 worth of this stock, of which $10,000,000 had been sold for cash and the rest had been issued in exchange for the capital stock of 84 different banks. Of the 84, about half were in Minnesota and half in seven other states, which judged by local standards are nearby. In the eight states over which the Northwest Bancorporation cast its name, there are 119 cities with populations greater than 10,000. In more than half of these this Bancorporation owned a bank, and officially announced: "It is fair to assume that, eventually, there will be located in *each of these cities* one or more banks affiliated in this Group [i.e. Northwest Bancorporation]". Pause to reflect we must, for an astounding vision looms. These banks in each and every city are not to be labeled branches. Indeed they retain their former names and have separate boards of directors. But the Bancorporation means that every man, woman and child within motoring distance of a 10,000 population town in any of eight states will be invited, nay, urged, to place all his or her money under the protection of a bank whose capital stock is controlled by the corporation of which Mr. E. W. Decker is president. Literally all of Everyman's money—or for the matter of that, all his easily transferable wealth. For, of course, the Bancorporation promptly organized a securities vending concern, and it includes trust companies so that it can provide investments for all the living and estate-handling for all the dead. This can happen, even though the local law flatly forbids banks to have branches, because the Law, so vainly unimaginative, never dreamed of Bancorporations, much less of prohibiting them.

Ogreish? Certainly not. Continue the tale. The formation of the Northwest Bancorporation was as redolent of patriotism as any event in recent U.S. history. Not Nathan Hale patriotism, for it exhibited nothing of sacrifice: the goal is profit. But Drake and Raleigh patriotism, yes; for the profit was to be sweeter since it was to come from the increased greatness *and* glory of the Country. The Country in this case is not the United States of America, but The Northwest. No map marks out this Country. In an early issue FORTUNE will do so. Vaguely it is miles of earth, miles of sky. A big part of it is known to bankers as the Ninth Federal Reserve District. This part contains some cities the world has heard of—Minneapolis where Pillsburys, Washburns and Crosbys have made flour unto the third generation, where Peaveys and Heffelfingers have produced giant elevators (grain) and men (footballers); St. Paul, whence Hill the Empire builder, his son and his son's son, whence statesmen, and on whose flank are stockyards; Duluth, fecund Iron Mother. But mostly you have never heard of the cities—Lead, Deadwood, Rapid City dominate the Black Hills (Coolidge 1927) section of South Dakota. All the towns of North Dakota with a population of more than 5,000 are: Bismarck, Fargo, Devils Lake, Jamestown, Minot. In Montana are Anaconda, Billings, Bozeman, Kalispell, Missoula; back in advanced Minnesota are Bemidji, Cloquet, Crookston, Hibbing, New Ulm, Rochester, Stillwater, Virginia, Winona. (Winona's bank was founded in 1854—oldest bank in the Bancorporation.) It would be mawkish to say that Mr. Decker carried all these names engraven on his heart as Mary, Calais. His mind's eye sees more often the vast things the little towns command—mountainous pits of copper, of zinc, lead and iron; spindle-footed sheep sillily bearing a fleece to mantle mankind; lonely rails; land; milk.

This is the Ninth District; but the Bancorporation reached South, took Iowa through the big bank which served Des Moines' 400 manufacturers; took Nebraska through meat-packing Omaha. Also it rather curiously absorbed a bank in Spokane, Wash., which makes the next story.

Far from being a lone star (as Giannini may be said to have been) Mr. Decker was rather the presiding spirit of a noble conspiracy which included half the leading men of the Twin Cities. In the stolid idiom of our day, Mr. Decker explained it: "Along with other bankers and businessmen, we of the Northwestern National Bank felt a growing sense of responsibility for the financial welfare of this territory. . . ." With Mr. Decker were, and now on the Bancorporation's Board are, such names as Pillsbury, Crosby, Bell (General Mills), Budd (Great Northern Railroad), and the Chief Justice of the state. And when banks in other states came in, other tycoons came in as conspirators in equal standing. Their conspiracy was, of course, to give financial power and security to the Northwest they loved. So excellent was the conspiracy that they had not been operating six months before an almost exactly similar conspiracy united the other half of the leading men of the Twin Cities. In April Clive Talbot Jaffray announced the formation of the First Bank Stock Corporation. Whereas the Northwest Bancorporation had acquired banks in eight states, this new holding company announced that it would confine its efforts exclusively to the Ninth Federal Reserve District. Otherwise the aims and methods of the two corporations are almost identical. And here is a recent table showing what banks each owns:

No. of banks in:	Northwest	First
Minnesota	42	36
Montana	6	13
N. Dakota	9	12
S. Dakota	9	10
Michigan		3
Wisconsin	7	
Iowa	4	
Nebraska	6	
Washington	1	
	84	74

Total resources of the Bancorporation were $465,000,000. The First Bank Stock Corporation followed hotly with $444,000,000. Between them they control 58% of all the bank resources in Minnesota and their average age is less than one year. For all its dramatic suddenness there were, of course, decades of history behind the formation of both the Decker and Jaffray groups.

This, of course, is revolution—a turn of the wheel, not disruptive, quite peaceable, nevertheless a full turn. Well, therefore, may John W. Pole, U.S. Comptroller of the Currency, say: "In the absence of government permission for branch banking in its true sense, present developments indicate that group banking, under the force of economic law may eventually displace the present system of country unit [i.e. independent] banks." And Mr. Craig B. Hazlewood, recently President of the American Bankers Association: "I believe group banking will develop further, that there will be standards for its handling which will make it a permanent and sound business."

The good that can be said for group banking is obvious, and the evils are difficult to state. In the first place, the evils are theoretical as none have yet developed. Second, you cannot indict group banking without indicting almost the entire business aristocracy of the Northwest. In short, no corpse, no case.

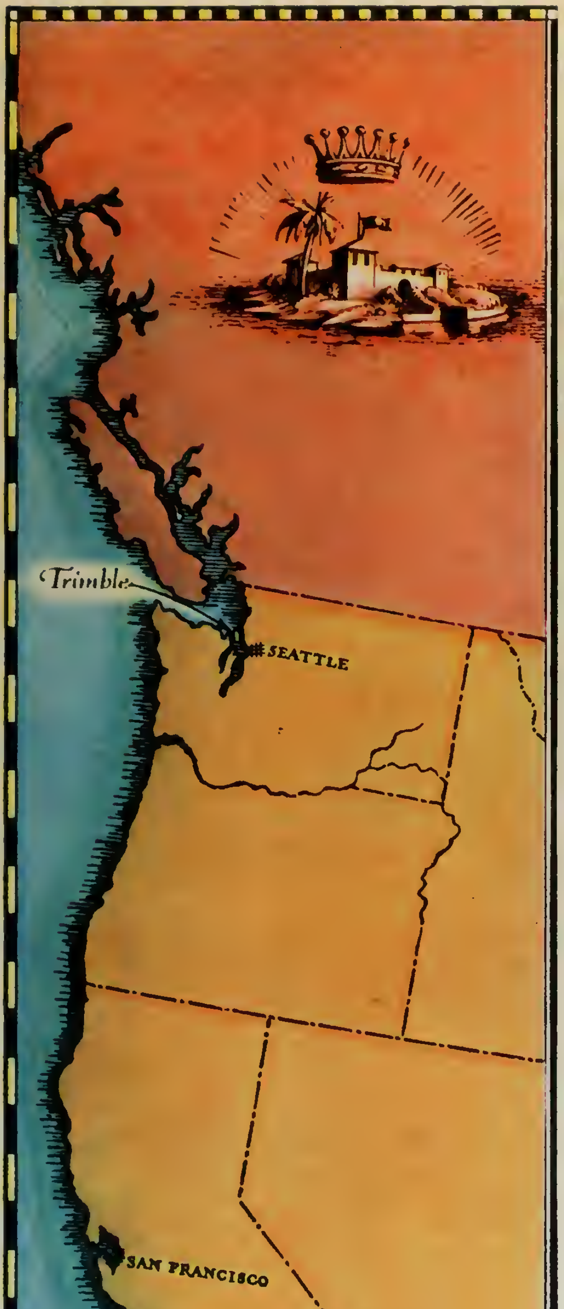
But difference of opinion, which is immediately important, arises from the question whether group banking is or ought to be regarded as a precursor to branch banking. Many of the 107 directors of Northwest Bancorporation think it ought to be. Mr. Pole, of course, prefers regional branch banking to group banking. In New York, the venerable *Commercial & Financial Chronicle* is savagely hostile to group banking and branch banking: "If the head bank [of a group] loans disproportionally it is a leech upon the members. If the pooled credit is distributed ratably it has gained no more than it would by a system of correspondents." And an anonymous economist concluded that "a good argument for branch banking is that it would tend to check chain banking." The feeling is simply that unit banking is one system and branch banking another, which neither a Webster nor a Bancorporation could logically reconcile. But while bankers frequently exhibit a childish incapacity for ratiocination, we must also, in such matters, distrust the perfect logician. Certainly the two rival giants of the Northwest do not base their claim to existence on the prospect of branch banking. On the contrary they sing, for the present, a song of independence-within-unity, a song of Federation sweetly harmonious with American Tradition. And, finally, let us record that their song is vigorously applauded by a large part of the population of their territory which understands it. For now many businessmen of these states feel that they are no longer barbarians outside the pale of high finance. Now they have safety. Now they have service on a metropolitan scale. Now they have financial institutions of such magnitude that—whether it be participation in the bonds of the world bank or some more trifling matter—they will have duly elected representatives in the councils of the great. The business

[*Continued on page 136*]

A FEW OF THE LEADING BANKING GROUPS, WITH RECENT STATISTICS, INCLUDE:

	Date formed	Banks in group	Resources
Transamerica Corporation (Successor to Bancitaly Corp., formed 1919)	1928	20	$2,800,000,000
First National-Old Colony Group (Boston, Identified with D. G. Wing.)	1929	19	700,000,000
Detroit Bankers, Inc. (Reputed "Fisher" connections to both this and the following group.)	1929	23*	700,000,000
Guardian Detroit Union Group, Inc..	1929	23*	550,000,000
Marine Midland Corp. (Bankers Rand of Buffalo, Stauffen of N. Y.)	1929	17	534,000,000
Northwest Bancorporation	1929	84	465,000,000
First Bank Stock Corporation	1929	74	444,000,000
Wisconsin Bankshares Corporation	1929	27	290,000,000
Anglo National Corporation (San Francisco's Fleishhackers.)	1928	21	278,000,000
Banco-Kentucky (Louisville, President: J. B. Brown.)	1929	4	215,000,000
Shawmut Group (Boston)	1928	6	211,000,000
First National Bank Group (Atlanta)	1929	6	125,000,000
Southwest Corporation (Tulsa, Okla.)	1929	10	90,000,000
BancOhio Corporation ("Wolfe Interests": H. P. Wolfe, three sons and nephew.)	1929	4	85,000,000
Financial Institutions, Inc.. (Maine; President: Publisher & Banker Guy P. Gannett.)	1929	9	68,000,000
Marine Bancorporation (Seattle)	1927	10	54,000,000
First Security Corporation (Utah. Identified with Mormons Eccles and Browning.)	1928	25	48,000,000

*Estimate before actual organization.



Island Kingdoms

Behold the 20th century refugee. Off shore he builds his home, makes his laws, flies, if he will, his own flag.

ALONG the marshy shores of Grand Isle, Louisiana, creeps the diamond-back terrapin, a reptile, the very thought of which makes an epicure's mouth water. Devious are the ways of the terrapin, for he lives neither on land like his cousin, the tortoise, nor in the sea like his cousin, the turtle. In brackish sea marshes, where salt and fresh waters mingle, he disports himself, lazily navigating the creeks and browsing upon the periwinkles that cling to every blade of eel grass. So multitudinous are the periwinkles that, except for his human foes, the terrapin would greatly increase and multiply on this easy food. There was a time, indeed, when terrapins were so common in the southland that they were fed to slaves, and were said to annoy fishermen by choking up their seines. Today fishermen would not be at all annoyed, for diamond-back terrapin ranks with truffles and caviar as a gastronomical delicacy.

Grand Isle is easily the centre of the terrapin industry. There lives John Ludwig, the terrapin king, whose pens are the most extensive in the world, and who ships north each year about 75,000 of the creatures. Snaring them over a wide area, trappers bring them in to the Ludwig pens, where they are fattened for a while on fish, blue crabs, oysters and fiddlers, and then sent north, mostly to the New York market, in barrels of ice. On this island, too, live nearly 1,000 cucumber cultivators. And in happy profusion are oysters, shrimps.

Just north of Grand Isle is Las Conchas Island where some years ago oil was struck, not oil for engines but oil for salad. On it was born the Wesson Oil & Snowdrift Co., Inc., whose chief parent, Mr. A. D. Geoghegan, quite logically owns the island. Here is a seventeen mile wilderness of beach, live oak jungles and marshes that produce 20,000 muskrat pelts a year. But guests on Mr. Geoghegan's yacht, the Sweetheart, generally see a more civilized Las Conchas: an artesian well, a sewage plant, a plant for making ice, a 125-acre pecan orchard.

All along our coast are islands like these, privately-owned kingdoms on the shores of a democratic mainland. Far north in Maine is John's Island, retreat of the steelmaking Lauders and south of that is tiny Mouse Island where Harry Emerson Fosdick finds relief from urban sophistication. And along the Pacific too are strewn the kingdoms, Mr. Wrigley's Catalina, and William Pitt Trimble's Trimble Island. More and more our wealthier and retiring citizens are coming to realize that in this industrious age there is only one means of living to one's self, to retreat to a body of land completely surrounded by cold, deep water. As a symbol of great possession the privately owned island may yet supplant even the steam yacht. Certainly our shores are already fringed with these private kingdoms, each with some strange, distinctive feature, strung along the coast line from the St. Lawrence to Puget Sound. To tell of all would be impossible but to learn of some, read further:

Canada

Chocolates

Only an island emperor could single-handed establish prohibition over an area the size of Connecticut. As "chocolate king" of France, Henri Menier had a natural antipathy to liquor, immemorial enemy of sweetmeats. When he bought Anticosti, the "Isle of Shipwrecks" that sprawls its huge bulk across the St. Lawrence, M. Menier decreed that his realm should be dry, and dry it was. Down to the smallest detail he drew the plans for his mansion on the island, insisting that every plank should be screwed into place. Although he had intended to live in solitary splendor in his mansion, whither he brought objets d'art, rare furniture and tapestries, he soon began to develop Anticosti commercially. He had planned a hunting lodge that was to be the talk of the Paris boulevards. Instead, he put up a pulp mill. Shrewdly, he built fishing camps which he leased to Americans, imported from Europe a thousand farmers with their families to settle on his island, established some lucrative silver fox ranches. When he died, his island was worth many times the $175,000 that he had paid for it. Three years ago his brother sold Anticosti to the Wayagamack Pulp & Paper Co., Ltd. for $6,000,000, a nice profit for the estate but not too high a price for the enormous island.

Castles

Architecturally, at least, Heart Island in Alexandria Bay is a mediæval barony. New Yorkers sailing past its towers and turrets find them curiously reminiscent of their own Waldorf Astoria Hotel, which was wrecked last year. This is no casual resemblance, for George C. Boldt, owner of the Waldorf and outstanding among hotel men of a generation ago, once planned to make the island into a summer home for himself and his wife. Their plans were ambitious, and the architects and builders were told that money was no object. From the Boldt quarries on Oak Island came barges of granite for the walls of the castles, the Alster Tower, and the Romanesque power house. These buildings had been nearly completed; the island had been changed into the shape of a heart; a fish pond, a lake for swans, an Italian garden had been created; about $2,000,000 had been spent on the project. Then Mrs. Boldt died. All work was stopped; the workmen left the island. In a few years the gardens were overgrown with weeds, the ponds choked with water plants; the buildings suggested mediæval relics, their stone chambers empty and silent. Though Mr. Boldt returned to the St. Lawrence, he never visited Heart Island again.

Maine

The Simple Life

On Chanterelle Island there is a semicircle of twelve small cottages connected by flagged walks. In the centre is a dining hall and kitchen; down by the shore a large recreation hall straddles on piles over the water. To this little township come each summer its owner, Miss May Hannis, of Bala, Pennsylvania, her sister, and their friends. Aided by a Kohler power plant, an artesian well, three motor boats, and a small staff of servants, they lead the simple life. The rustic charm of the island has carefully been left untouched.

Flannel Shirts

When the vanity of urban life weighs too heavily on Harry Emerson Fosdick, he retreats to Mouse Island in Boothbay Harbor, which he owns jointly with G. Ellsworth Huggins. They too have preserved the natural beauty of their thirty-acre island, whose spruce and pine trees are rooted on bedrock. Dr. Fosdick says of his island: "It is far enough from the mainland so that we can live an entirely unsophisticated life; that is to say, a man can put on a flannel shirt in the morning and go to bed in it at night if he feels like it."

Candles

Every summer for thirty-five years Dwight Blaney and his family have deserted Beacon Hill, Boston, for the rugged fastnesses of Ironbound Island, four miles from Bar Harbor. There Mr. Blaney and his friend, John Singer Sargent, have painted many landscapes, hunted mink and red squirrel with a pack of retrievers. Though Ironbound has a model farm and a fleet of power boats, no electric lights are snapped on at night. The only form of illumination Mr. Blaney will allow is the soft light of candles.

Sanctuary

The largest heronry on the North Atlantic coast is at one end of Bartlett's Island, which is owned by Augustus Peabody Loring and William Caleb Loring, Boston patricians and men of law. By their intercession the three square miles of Bartlett's Island form a legal game sanctuary, attracting many a deer, fox, mink, rabbit, partridge. Muskrats and black duck breed in its ice pond. The brothers Loring, beefeaters, do not extend their protection to domestic animals, maintaining an island slaughterhouse for their own livestock. Although the Lorings maintain three comfortable houses and a twin-screw cargo boat, they bar the telephone and electric light from their island as rigidly as they ban shotguns. For twenty-three summers kerosene lamps have lighted their houses. Three generations ago there was a township of fisher folk and a dozen farms on the island, but today only the Lorings enjoy its woodlands and pastures or walk along the shady roads.

New Hampshire

Codfish

Rockbound, tourist-ridden, the Isles of Shoals cluster together outside Portsmouth Harbor. There is Star and Cedar and Appledore and Smuttynose and Lunging, all of them small and neighborly. If the Rev. Mr. F. B. Crandall should sell his Lunging Island, he would do well to exhibit it to prospective purchasers at low tide only. For when the tide comes in, his island rapidly dwindles from five to a modest three acres. The late Frank Ferguson, of Cram and Ferguson, architects, once lived on the island in "Honeymoon Cottage," which he remodeled after designs from his own office. This cottage, summer and winter, is always ready to receive shipwrecked mariners. Two of its doors are never locked; a fire is laid in the Franklin stove; there is oil in the kitchen range and canned goods on the shelves; and the owner sees to it also that there are plenty of blankets on the beds and dry clothing in the closets. The Rev. Mr. Crandall is landscaping his three permanent acres, setting in beds of old-fashioned perennials, planning a rock garden and a sunken garden. A crowning symbol, there will arise a flagpole bearing as a weathervane a gilded codfish.

Massachusetts

Peacocks

Wrote Joshua Crane, Harvard '90, to his classmates: "I have just been elected King of No Man's Land, southernmost island and piece of land in Massachusetts." "Josh" Crane is a versatile sportsman: he has four times been National court tennis champion, has coached Harvard football teams, and was a member of the Dedham Polo Club team that defeated the Westchester Club for the National championship. On his No Man's Land he has a shooting lodge, imports from Hungary pheasant, ducks, and geese to make the sport more interesting. Peacocks strut on the close-clipped lawns that surround the main house, set in the midst of flat, treeless moors.

Feudal Forbes

For three generations Naushon Island, near Martha's Vineyard, has been the private domain of the ancient, important Forbes family of Boston. Sheep graze in its meadows and deer

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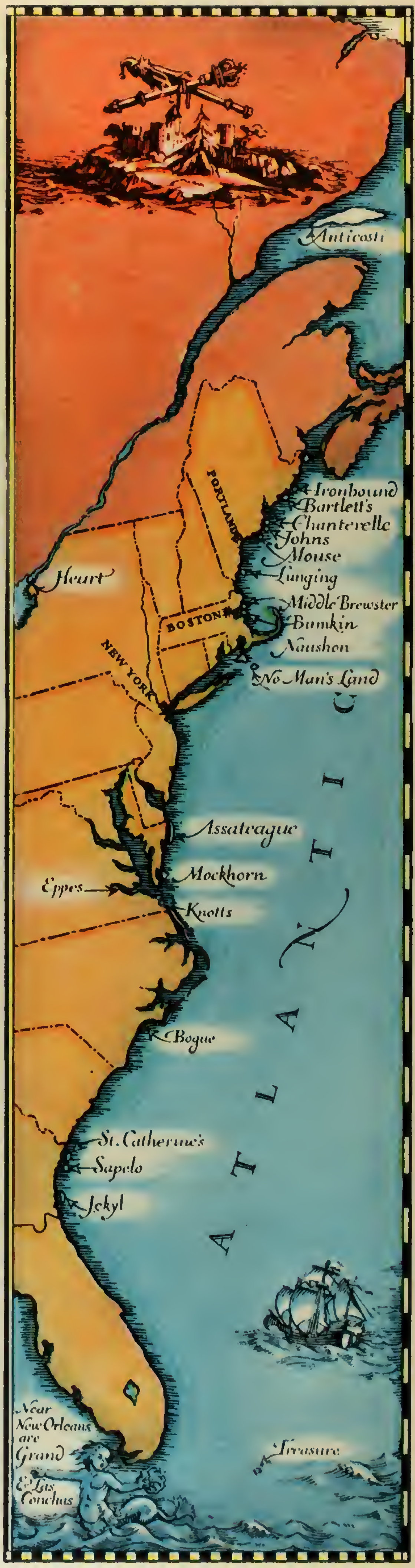
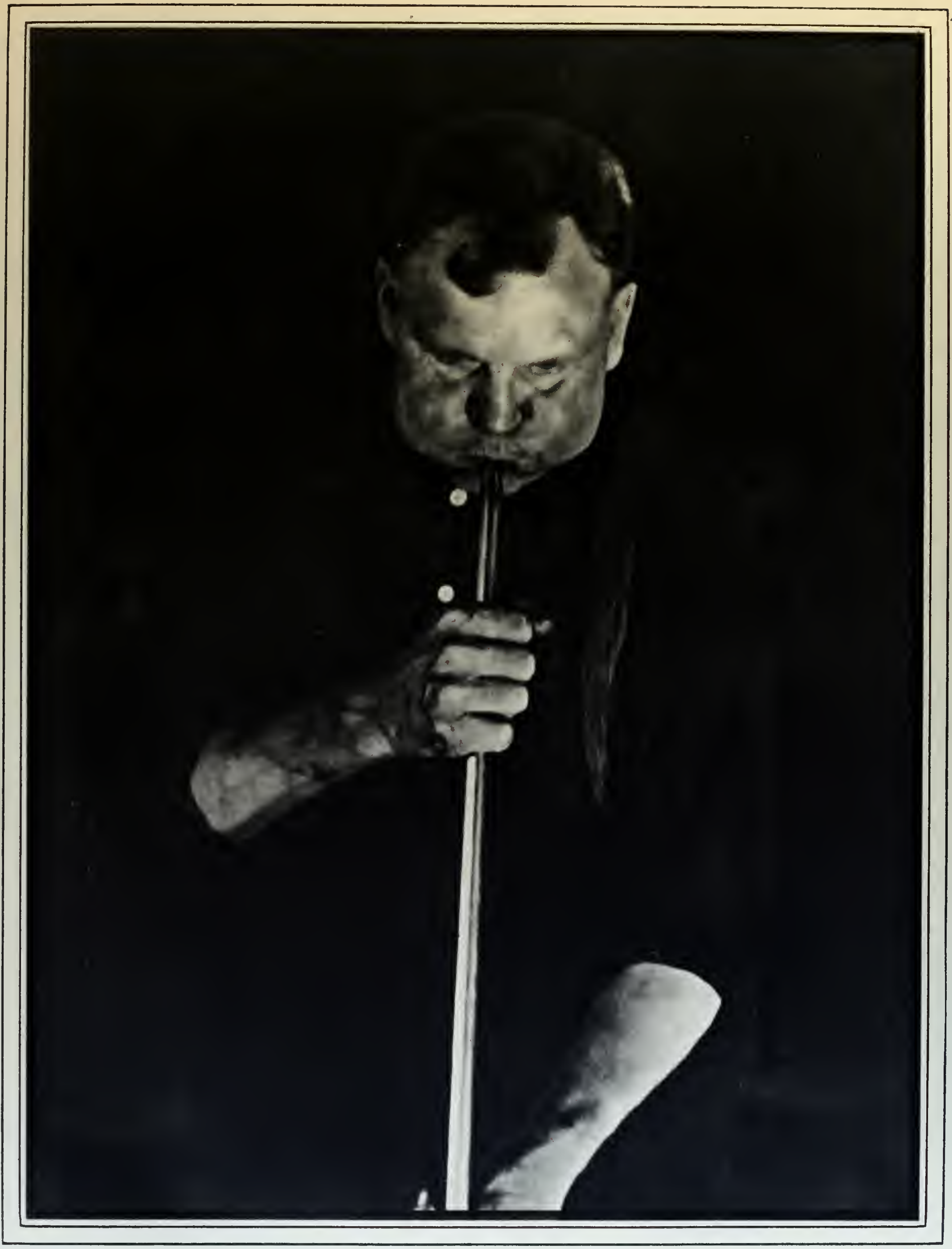




LIKE A MODERN GABRIEL SOUNDING HIS HORN, THIS WORKMAN PUFFS AWAY, EYES BULGING, CHEEKS DISTENDED. AND IT IS INDEED A LAST TRUMP HE IS SOUNDING: THAT OF HIS OWN TRADE. FOR HE IS A BLOWER OF GLASS, WHOSE CALLING HAS GONE THE WAY OF ALL CRAFTS BEFORE THE INVADING MACHINE.

Sand into Glass

New machines replace ancient skill. But at Corning, N. Y., industry still finds use for the power of human lungs and René Lalique keeps 600 men to crystallize his designs.

ASK a chemist about the ingredients of glass and he will talk about silicon. Perhaps the simplest definition of silicon is that it is one of the things that the earth is largely made of. Silica, an oxide of silicon, comprises about three-fifths of the earth's crust. Next to oxygen, silicon is commonest of elements. No politician would refer to the silicon-bound shores of Maine, yet the rocks of Maine (or of almost any other locality) have in their makeup a large silicon content. So common a substance as quartz, or oxide of silicon, represents one member of the silicon family in relatively pure state. And a combination of carbon and silicon gives carborundum, hardest substance next to the diamond.

Now the glass maker probably does not take much interest in silicon, nor is it necessary that he should. Glass was made long before probing scientists discovered and labeled the silicon family. From the layman's standpoint, glass is made chiefly from sand. But sand is simply the crumbled fragments of rocks—that is silicon oxide in a conveniently powdered form. Children will probably never fall off to sleep under the impression that the SiO_2 Man is coming for them, but from a chemical standpoint the great sand-piles represent merely a usable and transportable silicon supply.

A SHOVELFUL OF SAND IN THE HANDS OF A BRAWNY WORKMAN IS THE GENESIS OF ALL GLASS

MASKED MEN WHEEL THE SAND TO THE MIXING ROOM

To the workmen in the glass factory, however, sand is simply sand, and plenty of it. Standing amid heaping dunes of white particles (like Cape Cod brought inland or a small section of the Sahara) the workman shovels them into a waiting hand-cart. A mask covers his mouth to keep the fine dust

KNEADING THE OVEN CLAY—OLD STYLE

out of his lungs. Other men, also grotesquely muzzled, trundle the cart into the mixing room. Here the sand is mixed with litharge or lime, with soda or potash or borax, and with any one or more of a hundred other ingredients depending upon the purpose for which the glass is intended. Originally sodium salts were obtained from sea water and potassium salts from wood ashes, but today these salts are obtained mostly from salt deposits. The largest deposit of potash salts is in Germany. During the war there was a shortage of potash outside of Germany and it was necessary to return to wood ash as a source. Since then, however, an adequate American supply has been obtained from Searles Lake in California. Sodium salts have always been very plentiful and the largest commercial consumers are obtaining their supply from so-called "salt wells" located in various parts of the United States.

ONLY A WOODEN BRICK AIDS THIS MAKER OF CLAY POTS

After the batch has been properly made, it goes next to the furnace. Here, in the application of heat, is performed the major glass miracle—the transformation of opaque particles into a transparent solid. Silica, like the rest of the earth's crust, was formed by the cooling of the molten, liquid masses of which the interior of the earth is still composed. In its molten state, it is not only a liquid, but also a transparent liquid. So when the silica in the glass furnace is heated and melted, a transparent liquid results. And if, as in the glass factory, it cools off in the space of a few hours instead of through the centuries that it took the earth's crust to cool and solidify, it cools so rapidly that it is still transparent when it has become again solid. If it were left alone for a few hundred thousand years it might go back again to the rock whence it came.

The furnace tending job in the glass factory is much like the corresponding job in a steel mill. The sandy batch is cooked in clay pots or tanks, not only because clay can stand higher temperatures than steel, but also because there is some unexplained hostility between steel and silicon so that when molten glass comes into contact with steel its surface becomes roughened and spoiled. Twenty-six days are spent in the building of a clay pot and six months in drying. Modern glass making is shifting away from the comparatively small, hand-built pots to large tanks with greater capacity and about a year's life.

Mixing and heating produce the transparent liquid from which glass is made. Shaping it is the glass-blower's business. It is an extremely hot business, because although molten glass is easily workable the cold glass is of course the familiar brittle substance through which boys so readily throw bricks. So the glass worker must work with his material still hot, as though the steel worker had to build a locomotive out of molten steel. Over the glass-blower's head is a ventilator to spray him with cool air. Water-cooled metal screens protect him somewhat from the withering heat which gradually crumbles the inside of clay pots eventually causing their discard. His mouth is ringed with tough flesh from long applications to blow-pipes. His palms are calloused from contact with hot irons. But he is a skilled worker, a well-paid worker, and he has the craftsman's pleasure in watching something shape itself under his hand.

The glass making itself is divided into two general operations—gathering the molten glass from the pot, then working it into its final form. A young workman thrusts a long iron blow-pipe into the fiery pot. He twirls the pipe around to gather on it a blob of molten glass, like twirling a knife to get honey out of a jar. Out comes the pipe, a glowing, viscous mass collected on its end. Then the pipe is passed to the master workman, who blows into it, twirls it in arcs like a bandmaster's baton, spins it deftly between his hands. He must work fast before the glass cools and hardens. His manipulations sprout on the end of the pipe a swelling growth of plastic glass which he places into a mold at his feet. When he or his helper has clamped the mold shut, he puffs into the pipe. The glass swells up inside the mold, taking on its final shape. The blower lifts it out, inspects it for flaws, puts the pipe with the finished glass still attached into a rack to cool down. Then he or a boy detaches the glass from the pipe and it is put on an endless belt on which it travels gradually from hot to cool temperatures.

The processes just described are essentially hand processes; the glass industry, indeed, from the time of the Egyptians and Phœnicians was dominated by the hand worker. Even as recently as 1900—a full century after the period generally covered by references to the "mechani-

THE POTS ARE SHOVED INTO BLAZING FURNACES cal revolution"—the worker in glass had no machine competition. The industry in this country was virtually controlled by *Local 300*—a glass-workers' union which had built up a labor monopoly and dictated even to the glass manufacturers themselves. One manufacturer—the American Window Glass Company—put a $500,000 block of its stock in trust for the union and gave the union representation on its board of directors.

In 1908 came the introduction of the first glass-making machinery—an innovation against which *Local 300* sternly set its face. None of its members were permitted to work in plants where machinery was used; defiant, the union adopted an uncompromising *No Surrender* attitude toward the machine invasion. Instead of adapting itself to the machine (it might, for example, have extended its membership to the relatively unskilled machine-tenders) the union insisted that in the glass business, at least, the modern world should move at a mediæval pace. Eventually, of course, the machine triumphed. It learned to perform more and more of the operations formerly sacred to the handworkers' skill. By 1922 the tide had definitely turned toward the machine; by 1924 *Local 300* had lost its position as wage-fixer for the industry; in 1927 the union made a belated and unsuccessful attempt to unionize unskilled labor; and in 1928 *Local 300* disbanded. Said its president, in its obituary notice: "No human agency could have saved the hand-craft . . . The mistake we made was in clinging to the old guild idea. That has no place in modern American industry."

Largest units in the glass industry today are Owens-Illinois Glass Co. of Toledo and the Pittsburgh Plate Glass Co. Owens-Illinois (whose merger with Continental Can Co. is indefinitely postponed) is in the container field, manufactures ink bottles, perfume bottles, druggists' bottles, bottles of every kind. It makes about 50% of the beverage bottles used by Canada Dry, White Rock and Clicquot. The Pittsburgh company (in which the omnipresent Mellons are interested) makes plate, window, spectacle and mirror glasses and a side line of paints, lacquers and solvents. In both companies the majority of operations are mechanical.

THE APPRENTICE GATHERS THE MOLTEN GLASS

Thus, after some 5,000 years of unquestioned supremacy, the skilled glass worker fought and, in 20 years, lost his battle with machinery. It should not, of course, be concluded that there is no skilled hand labor remaining in the glass business. Few industries become so thoroughly mechanized that the human element in the equation reaches the zero value of pulling a knob or turning a handle. Furthermore, there are many glass making operations in which the hand worker is still indispensable. Bottles and other ordinary containers; window-panes and other sheet products belong to the machine. But in the manufacture of laboratory apparatus, of decorative ware, of odd-shaped, non-standardized and small-volumed glass products, the glass-worker still follows the trade of his forefathers in much the way that they followed it. There exists, and there will always exist, a place for the skilled craftsman. But it is not the high place from which he so recently fell.

* *

In the production of artistic glassware the craftsman still reigns supreme. The Corning Works have their Steuben division, where white-haired old glassmakers slowly mold and blow vases, bowls, candlesticks, and such decorative articles. But the center of modern glass craftsmanship is in France. There René Lalique, slender, trim-mustached, with the look of a scholar, is hard at work in his Paris atelier. He is drawing designs for every sort of object—bowls, perfume bottles, doorknobs, chandeliers, candelabra, intaglio seals, dinner plates—and all to be executed by his hundreds of glass craftsmen. From the two Lalique workshops, one at Fontainebleau and one in Alsace, flows an uninterrupted stream of vases, clocks, bottles, glasses, plates, picture frames, bowls, on which are etched or molded birds, beasts, flowers, fruits, fishes, nymphs, satyrs, and every sort of decorative device. The shops of Europe and America sell these products. The New York specialty shop, Jay-Thorpe, has a room designed and executed by Lalique to display his wares in which even the doors are of etched glass. And Lalique did an all-glass bathroom for Corinne Griffith.

Commercially, René Lalique is as successful as any man in France. Yet he knows little of "business" and cares less. He willingly delegates all business matters to assistants. Occasionally he visits the shop in the Place Vendôme where the products of his two factories are sold, but he is more interested in what is being sold than in sales volume. He wanders from cabinet to cabinet, sharply examining the contents. Stopping in front of one, he carefully picks two small crystal figures out of it. He turns to the head of the shop: "These must be destroyed. Phone immediately to the factory, tell them to make no more of them and to destroy the molds. They are not good." Fortunate is the craftsman who works for such a master.

THE BLOWER'S FINAL INSPECTION

Steadily laboring in his Paris atelier, refusing to see most visitors and talking to those he does see of only one subject: his work, René Lalique turns out an amazing number of designs—enough to keep 600 men busy crystallizing them into glass. Their skilled hands and eyes and lungs are indispensable to their master. It would take a very clever machine to satisfy M. Lalique. It would have to execute his designs, which employ every sort of motif from frogs to rosebuds, and to execute them in the most delicate detail. It would have to mold and turn out unbroken the feathery tails of peacocks and the flowing robes of a wood nymph. It would have to etch a thousand and one designs on glass, sometimes lightly and sometimes in deep relief. And it would have to be able to change from one design to another as easily and quickly as a workman lays down one piece of work to pick up another—for M. Lalique wants none of that infinite repetition that is the chief strength of the machine.

Portrait of

A Gentleman Funded Proprietor—this civilization's best example.

THE most conspicuous thing about Arthur Curtiss James is his *Aloha* and the next most conspicuous thing is his beard. Each is a splendid example of its type. The *Aloha* is the largest square-rigged yacht in the world and one of the most beautiful ships ever to sail the seas. The beard is an austere frame for a burly, sailorman face. No one can see the *Aloha* spread its 21 sails and forget the sight; few men have met Arthur Curtiss James and have forgotten the beard.

So glittering are these peaks on the James horizon that one is easily misled into believing the general visibility is good. Actually, the world at large knows less about Mr. James than about any other man of comparable importance. Thus it is that in spite of his wealth (and he is one of the richest men in the world), he has been neither greatly hated nor greatly loved. Beyond the *Aloha* and the beard is an able businessman, an active sportsman, a philanthropist and a gentleman. With none of these personages, who combine to make up Arthur Curtiss James, is the American public familiar.

It is not altogether because Mr. James has sought to avoid that familiarity. Although he has. Nor because he has done nothing dramatic enough to engage it. Although he is not given to dramatics. The reason is more general. The American public is totally unfamiliar with the type of person Arthur Curtiss James represents. It does not place him. He is neither a Harriman, making of his wealth a means to power, nor a Junior Rockefeller administering his fortune as a public trust, nor yet an Astor withdrawn from the sphere of active influence. He is something else, something more nearly comparable to a landed proprietor of nineteenth century English life, a man who has inherited a great property, who feels the responsibility of his inheritance, who intelligently increases it, but who does not make his holdings his career. Arthur Curtiss James is one of the first and perhaps the best example of the great funded proprietors Industrial Civilization must produce. He is an owner of railroads. But not as Hill was an owner of railroads, though the holdings are in part the same. Arthur Curtiss James is an owner of railroads because he had money to invest and because money was being invested in that day in railroads. Being a railroad owner he has properly concerned himself with what he owned. The possible merger of the Great Northern and the Northern Pacific which, with parallel lines, tie the Great Lakes to the Pacific, interested him. These two roads with the Chicago, Burlington & Quincy would make a system 26,500 miles long across the Northwest. He is also the largest single stockholder in the Southern Pacific, spanning the Southwest from New Orleans to Los Angeles, throwing a long arm northward to Oregon. It occurred to him that another north-south line along the Pacific would be valuable. "Having come to this conclusion," he told the I.C.C., "I bought control of the Western Pacific." He would like the Commission to permit him to link the Great Northern and the Western Pacific with a 200-mile road in California.

International

THE MOST DISTINGUISHED PARTICIPANT IN A NEWPORT FÊTE FOR CHARITY—ARTHUR CURTISS JAMES

Like a sensible estate owner he is not satisfied to guide these vast projects from his room in the Phelps, Dodge offices at 99 John Street, Manhattan. He goes over the property. But the tour of the property in his case takes him up and down the West. He purchases or sells. At various times in the last three years he has been officially listed as owning 46,016 shares of Northern Pacific (in the name of Curtiss Southwestern Corp.), 46,150 shares of Great Northern, 50,000 Southern Pacific (Curtiss Southwestern Corp.), 75,000 first preferred Western Pacific and the huge total of 474,987 Western Pacific common. The recent market value of these holdings was almost exactly $30,000,000 and they do not begin to represent the extent of the James investments. In the name of Mrs. James are listed 765 shares of First National Bank of New York; this holding alone is worth $4,000,000.

In 1889, at the age of 22, Arthur Curtiss James graduated from Amherst and went to work as a mail clerk in Phelps, Dodge & Co. He thus allied himself with one of the two principal Presbyterian families of the time. In Chicago, the McCormicks were making reapers. In New York the Phelpses and the Dodges were managing a copper mining and manufacturing business which they still in large part own. That young James should enter business via Phelps, Dodge was not surprising. More than 100 years ago, Daniel James combined with Anson Phelps to start a metals business which promptly failed. In 1848, Daniel's son—Daniel Willis James—became a partner of a revivified Phelps, Dodge & Co. Daniel Willis and James J. Hill were friends; Daniel Willis went on the board of the Northern Pacific. Through Phelps, Dodge he went on the boards of Ansonia Brass & Copper Co., Copper Queen Consolidated Mining Co. Young Arthur Curtiss fell into an atmosphere of copper and railroads, of expansion and Presbyterianism.

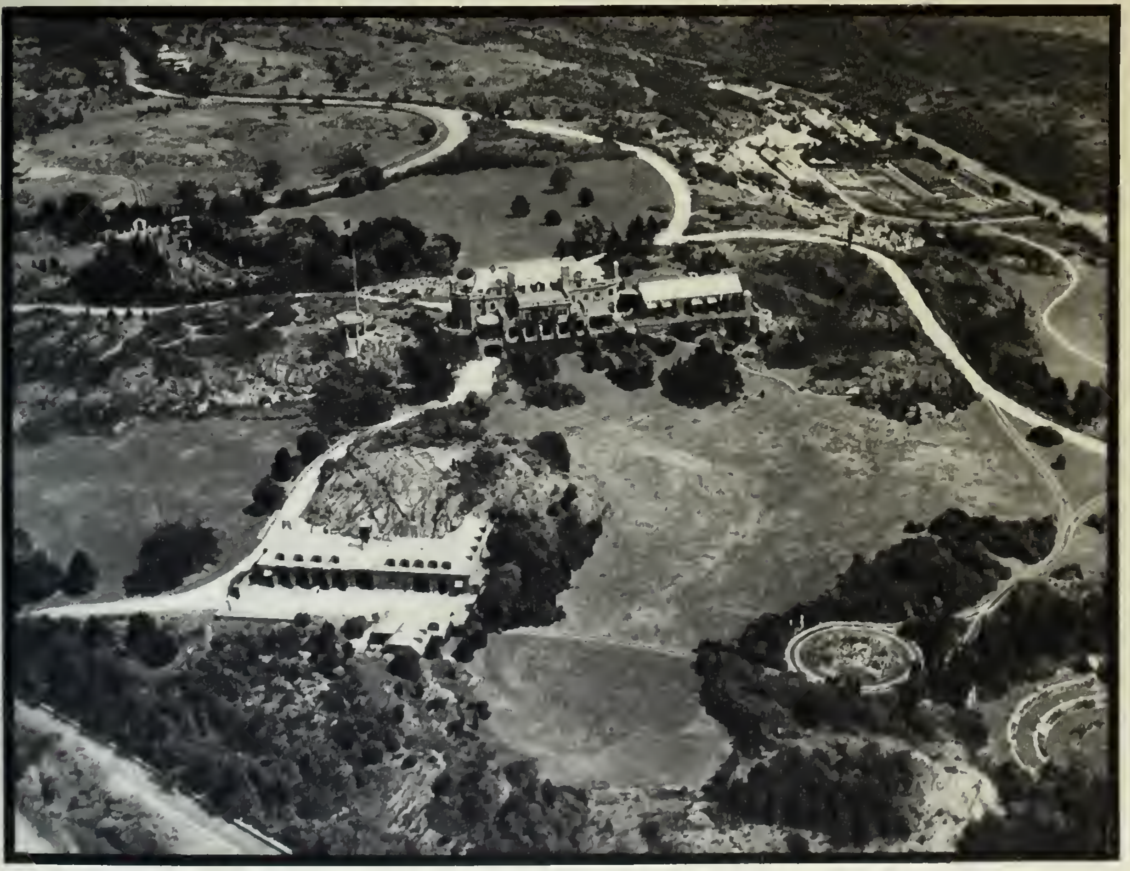
Daniel Willis died in 1907. To charity, he left $1,000,000; to his son, about $25,000,000. Presently, Arthur Curtiss James became member of the board and vice president of Phelps, Dodge. Presently, he took up the Hill tradition and many of the Hill securities. He went into the West; there he has flourished. His fortune has grown with the growth of the West; he has reaped the harvest of Hill's sowing.

Many of the new American fortunes (Cutten, Armour, Fisher, Chrysler,—have come out of the rich Middle West. With this enormous manufacturing section, Mr. James has no contact at all. His estate lies west of the automobile mills, west of the stockyards, west of the cornfields. And his private life is profoundly rooted in the East. When he is not in his Park Avenue house (still only 300 feet from the supposed center of Manhattan's most fashionable district), when he is not sailing the *Aloha* around the world, he is most likely to be in a big Victorian house (bay windows, a flagpole) on top of a Newport hill. Here he superintends the operation of his model farm, a re-creation of a picturesque Swiss village with the important addition of such modern improvements as automatic milkers. From time to time he walks with a black police dog in the "Blue Garden" where every flower is blue. If the day is pleasant, he plays a set of indifferent tennis with his good friend Admiral Sims. This year he will find time to watch the trials to select the defender of the American Cup against Sir Thomas Lipton. Both here and in New York he is often found seated at the organ, which he plays well. He is particularly fond of Wagner; his musical taste is both cultivated and catholic.

In the evening he may read or he may discover himself host at a large dinner party. His wife, a woman both beautiful and imposing (only Mr. James would dare call her "Bunny," their joint term of endearment), is one of New York's most celebrated hostesses. To her dinner tables come hundreds of distinguished guests; upon her dinner tables repose hundreds of orchids, her favorite flowers. When the women leave the table, they are invited to make their own corsages from the abundance before them. Upstairs at 39 East 69th St. is a sun-room filled with plants and flowers; by night their perfume steals to the surrounding bedrooms. The house is always fragrant, always superbly groomed, always a going concern. During the war it was busy with Red Cross activities, as both Mr. and Mrs. James were eager in war work. One war story concerns them both. When the German submarine U-53 made a dramatic appearance at Newport Harbor in 1916, the Jameses and some friends went on board. After they had been shown over the boat, the German officers offered cookies to children in the party. Mr. James asked for a cookie and examined it closely. Later he explained that he had been seeking the maker's mark, to discover if the Germans had a supply base along the coast. That night the submarine sank three merchantmen and some of the survivors sought refuge at the James home. Later, the *Aloha* served the U.S. as flagship for an admiral.

The James benefactions are great, ubiquitous and inconspicuous. Italy's Victor Emanuel has decorated him for his gifts to the Italian School of the Children's Aid Society. His great and Presbyterian friend, Henry Sloane Coffin, is grateful for his interest in Union Theological Seminary. And a little-known enthusiasm of Mrs. James is the Christodora (Gift of Christ) House at Avenue B and Ninth street. Of this non-sectarian center, where young (preferably college) men and women of New York may study and live and where the East Side poor may come for settlement help and recreation, she has been the head for 25 years. She always comes to meetings of the Board of Managers; in 1927 she and her husband rendered further services by erecting a new sixteen-story frame for Christodora House with finest furnishings and decorations. Mr. James is a trustee of Amherst, of the Children's Aid Society, of Hampton Normal and Industrial Institute.

Edwin Levick
THE *ALOHA*, THE UNFORGETTABLE


Airmap Corp. of America
A SWISS VILLAGE IMPROVED WITH AUTOMATIC MILKERS ADORNS THE NEWPORT HOME OF MR. JAMES

However distinguished he may become as a philanthropist (this, too, is an inheritance; Daniel Willis James gave away at least $3,000,000 in his lifetime), Mr. James will never be more philanthropist than sportsman. Sailing is his great love. In 1909 he succeeded Cornelius Vanderbilt as Commodore of the New York Yacht Club; the next year he built the 659-ton, bark-rigged *Aloha*. Greater pleasure has never come to him than when it sailed, in 1913, from Sandy Hook to Gibraltar in 16 days and 22 hours. Twice he has sailed the *Aloha* around the world. On September 15, 1921, the sirens of East River ferry boats heralded her first departure. For the next eight months, Commodore James was in his element, doing his daily dozen in pajamas on the deck, turtle hunting off the coast of South America, hearing a visitor (Miss Arabella Plimpton) recall "what was said in Northampton when Hetty Parsons married that wild young Arthur James". Then he would show how wrong Northampton had been by visiting churches and universities, by dining genially with the foreign great. But above all he loved the ship which carried him proudly over the seas. When he came back, he exclaimed: "The dream of a lifetime has been accomplished. Ever since as a boy my imagination was fired . . . "

Next summer the *Aloha* again will carry him back and forth between New York and Newport. Perhaps the trips will be less frequent than usual, for the opening of 1930 seems freighted with importance for railroad men. Whatever may be the result of the I.C.C.'s consolidation proposals, Mr. James, as America's greatest railroad stockholder, will have a busy year. He will negotiate, build, expand. Yet at the end he will remain to the public the same shrouded figure he has always been—the least understood rich man in America.

The Biltmore's Profit

Comes to circa $650,000—It might be more if Mrs. Dean were less meticulous.

THE Hotel Biltmore is one of six or eight hotels in all New York which are definitely first class.

This means that if one of its coffee cups is nicked, ever so slightly, it is promptly abandoned to the junkman. Hence last year it bought new china and glassware to the extent of more than a hundred thousand dollars.

This means that if a sheet becomes frayed, ever so little, the frayed corner will not be tucked under the foot of the bed. Therefore, the Biltmore spent eighty-five thousand dollars on *new* linen last year.

Both these items are classed as current expenses, for they recur in approximately the same amounts every year. If this year the Biltmore were willing to let its standard slip, it might well show a profit of $1,000,000. But in doing so, it would lose that priceless jewel, reputation.

Instead, its profit for 1928 (and no doubt 1929 will prove to be much the same) was something over $650,000, or just about 11% of its gross receipts of $6,000,000.

Whence came the six millions? Whence the profit? Look at the rows of figures on the opposite page and you will see. These figures contain in as complete detail as space permits, the essentials of high-grade innkeeping in the Twentieth Century. For them, the reader is indebted to the courtesy of that great modern innkeeper, Mr. John McEntee Bowman, and of his assistant, Mr. Robert S. Maffitt, Comptroller and director of the Bowman-Biltmore Hotels Corporation. These figures will not reveal any secrets to Biltmore rivals. For they are given in round numbers and some detail may be off by 10% or perhaps even 20%. But every hotelman will recognize it as a *true* picture; and a layman who apprehends this picture may feel that he knows (not vaguely but specifically) what it means to give bed and board to 1,000 exacting individuals every day at the centre of the world's most exacting city. And board to yet more individuals.

Biltmore photographs by Arthur Gerlach

LAST YEAR THE BILTMORE SERVED MORE THAN 1,000,000 MEALS

In one curious respect the Biltmore figures differ from similar hotels of its rank—viz., in the $5,000 which FORTUNE estimates as its profits from telephone service. Most hotels charge 10c for a local call which costs them less than 4c. But by the time they have paid for their girls, they are more apt to show a loss than a profit. However, the Biltmore is famous as a rendezvous and place from which smart shopping matrons may phone. Hence (including long-distance) the gross receipts from telephone is $300,000, which is probably more than double the Plaza's or the Ritz's. From such volume it is possible to pay the girls, reimburse the telephone company, and extract a tiny profit.

In the basic items the Biltmore runs true to the best rules. It is not the most expensive of hotels, but it is expensive. It is not the biggest, but it is very big—1,000 rooms and all manner of restaurants and other appurtenances.

FORTUNE has set up the accompanying figures to show *departmental* profit. The gross receipts, as we have said, are $6,000,000. After deduction of direct departmental expenses, the departmental profits are $2,575,000. But out of the total departmental profits must come all those expenses which cannot feasibly be split up among the various departments. These expenses amount to about $1,925,000, leaving about $650,000 as the Biltmore profit.

The biggest non-departmental expense is the rent of the building and of the land on which it is built and of the taxes and insurance thereon. This comes to $900,000, or nearly half the non-departmental expenses. Now, if one loves to fuss with figures, one might say that the rent could be split up between the rooms, restaurants, and

A PLAYROOM, A CHAPEL, A FOUNDRY, A TAILOR SHOP . . .

A WEEK'S WASH WOULD MAKE A TENT FOR MANHATTAN

Biltmore Operations Estimated

Departmental Receipts Less Expenses

ROOMS (from $4 each to $100 suite)		$2,100,000
Less: Maids and other wages	$300,000	
Laundry	30,000	
Uniforms, etc.	10,000	
Linen	40,000	
Cleaning	40,000	
Soap	3,500	
Miscellaneous	51,500	
	$475,000	
Departmental Profit	1,625,000	
FOOD		
From Restaurants	$1,750,000	
From room service	400,000	
From banquet	500,000	
Total Sales of Food		2,650,000
Less: Cost of food	$1,000,000	
Waiters', cooks', & other wages	650,000	
Menus	10,000	
Laundry	45,000	
Uniforms	15,000	
Decorations	60,000	
Kitchen fuel & expenses	50,000	
Music	170,000	
China & glassware	90,000	
Linen	45,000	
Silverware	15,000	
Miscellaneous	50,000	
	$2,200,000	
Departmental Profit	450,000	
BEVERAGES		130,000
Less: Cost of Beverages	$40,000	
Wages	10,000	
Glass, etc.	5,000	
	$55,000	
Departmental Profit	75,000	
TOBACCO		135,000
Less: Cost of Cigars & Cigarettes	$100,000	
Wages	9,000	
Miscellaneous	1,000	
	$110,000	
Departmental Profit	25,000	
CANDY & FOUNTAIN LUNCH		135,000
Less: Cost of Goods	$75,000	
Wages	30,000	
Miscellaneous	10,000	
	$115,000	
Departmental Profit	20,000	
VALET		55,000
Less: Wages	$20,000	
Miscellaneous	5,000	
	$25,000	
Departmental Profit	30,000	
TURKISH BATH		$70,000
Less: Chiefly labor	$40,000	
Departmental Profit	30,000	
GUEST AND HOUSE LAUNDRY		130,000
Less: Wages	$100,000	
Damaged articles	250	
Laundry tickets	250	
Soap	1,250	
Other Supplies	8,250	
	$110,000	
Departmental Profit	20,000	
RENTS & PRIVILEGES (various shops including Florist)		295.000
TELEPHONE		300,000
Less: Cost of Service	200,000	
Wages	60,000	
Rental of Equipment	20,000	
Miscellaneous	15,000	
	$295,000	
Departmental Profit	5,000	
GROSS SALES		$6,000,000

Recapitulation of Departmental Profits

Rooms	$1,625,000	
Food	450,000	
Beverages	75,000	
Tobacco	25,000	
Candy & Fountain Lunch	20,000	
Valet	30,000	
Turkish Baths	30,000	
Guest and House Laundry	20,000	
Rents & Privileges	295,000	
Telephone	5,000	$2,575,000
Less:		
Non-departmental Expenses:		
Repairs & Renewals	$ 345,000	
Rent, Taxes and Insurance	900,000	
Management	100,000	
Accountants & Auditors	100,000	
Heat, Light & Power	300,000	
Advertising	50,000	
Miscellaneous	115,000	
Bad Debts	15,000	$1,925,000
NET OPERATING PROFIT		$650,000

BURNISHED COPPER POTS LINE HUNDREDS OF FEET OF BILTMORE SHELVES

FEW GUESTS MEET MIKE THE TINSMITH

THE HOTEL IS ALSO AN UPHOLSTERER

other sections. Just a moment's reflection will show how fruitless this is. The first floor is the most valuable. Much of it is lobby. In order to divide up the cost of lobby one would have to put spies in it for a year to determine how many steps in the lobby were taken by guests who bought food and not rooms, by those who bought both, and by those who bought nothing but a phone call or kept a date under the well-known clock. The result would be barrels of theory and practically no fact to convert to profit.

The approximate departmental profit from rooms shown in the accompanying chart is 75 per cent, which the management knows by experience it should get from the rooms, and which it also knows it cannot get. It realizes that most of the rent, light and heat is chargeable to rooms; so it guides itself accordingly.

The Biltmore's food situation also runs true to type. Something more than $2,600,000, it received from the 1,000,000 meals it served last year. The actual food cost about $1,000,000. Another $1,000,000 and more went for waiters, cooks, cooking fuel, icemen, crockery, music, glass, etc., leaving a departmental profit of about $450,000. Management might be just as alarmed if profit went to $700,000 as if it came down to $300,000, for in the first case it might mean that nicks had been tolerated in coffee cups or inferior oil in the salad.

Without further ado beyond this explanation, the reader is referred to the chart, there to discover what he will:

the coincidence that people spend almost exactly the same amount for beverages as for tobacco, but that while beverages yield $75,000 departmental profit, tobacco with a much thinner profit-margin, yields only $25,000;

the amazing efficiency revealed in the fact that guests collect only $250 for damages out of a total laundry bill of $130,000;

that the salary of the manager and his immediate staff amounts to an almost imperceptible fraction (characteristic of big business);

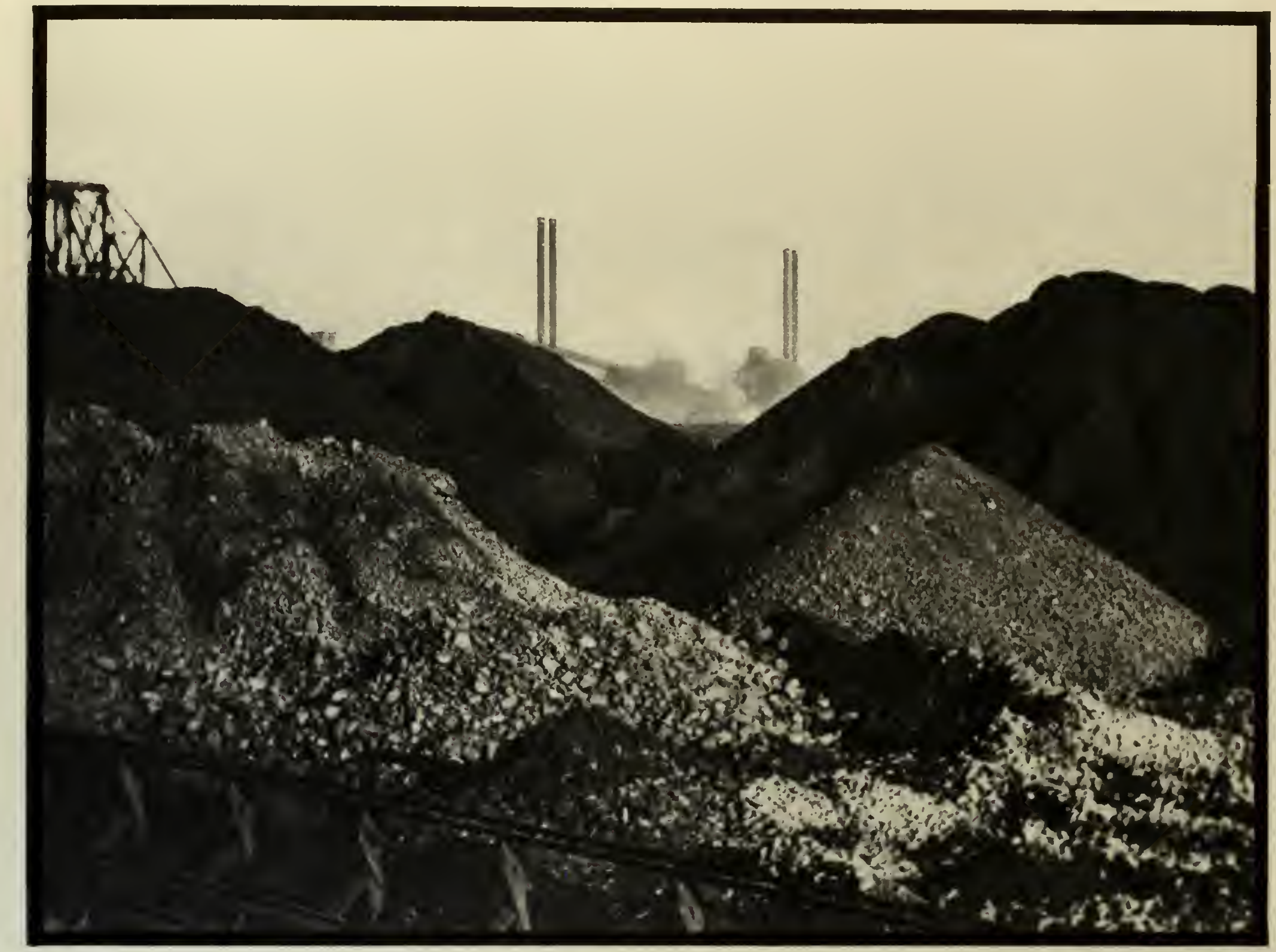
that the soap used is about $10,000 ($1,250 for guests' to laundry; $3,500 for guests' persons; $3,500 for the hotel's own laundry).

Discipline:

Leaving the financial considerations, let us look at some details of operation. All the details are summed up in the word: *Discipline.* Mine Host must be a Beau Brummel, but also he must have the capacity to get and maintain discipline which your ablest General or Admiral might admire. This discipline is reflected in the precision of the records covering every minute detail.

So accurate is the hotel's check that nothing, be it a conspicuous guest or one oyster in a cocktail, enters or leaves the building unobserved. Given a few minutes' notice, Mr. Hiram H. Schuyler, the Biltmore manager, could tell you that on January 20th, the guest in room 1170 arose at 8:11 o'clock and asked for breakfast; that breakfast costing $1.15 was delivered at 8:22 by Waiter Jones; that at 9:13 the guest went out for the day leaving exactly two suitcases, a portable typewriter, and a suit to be cleaned. There would be a record of the time when the valet called for the suit and when he brought it back. When the guest returned after dinner it was duly entered in a floor clerk's book; when he complained that the light on his night table was burned out it was recorded in a book along with the time of the complaint, the time of completed repair, the nature of the trouble, the name of the repairman. When the guest, two weeks later, wired from Seattle that his cuff-links were missing, the Biltmore was able to show that they had not been left in the hotel, but had been lost under a berth on the Overland Limited between

[*Continued on page 156*]

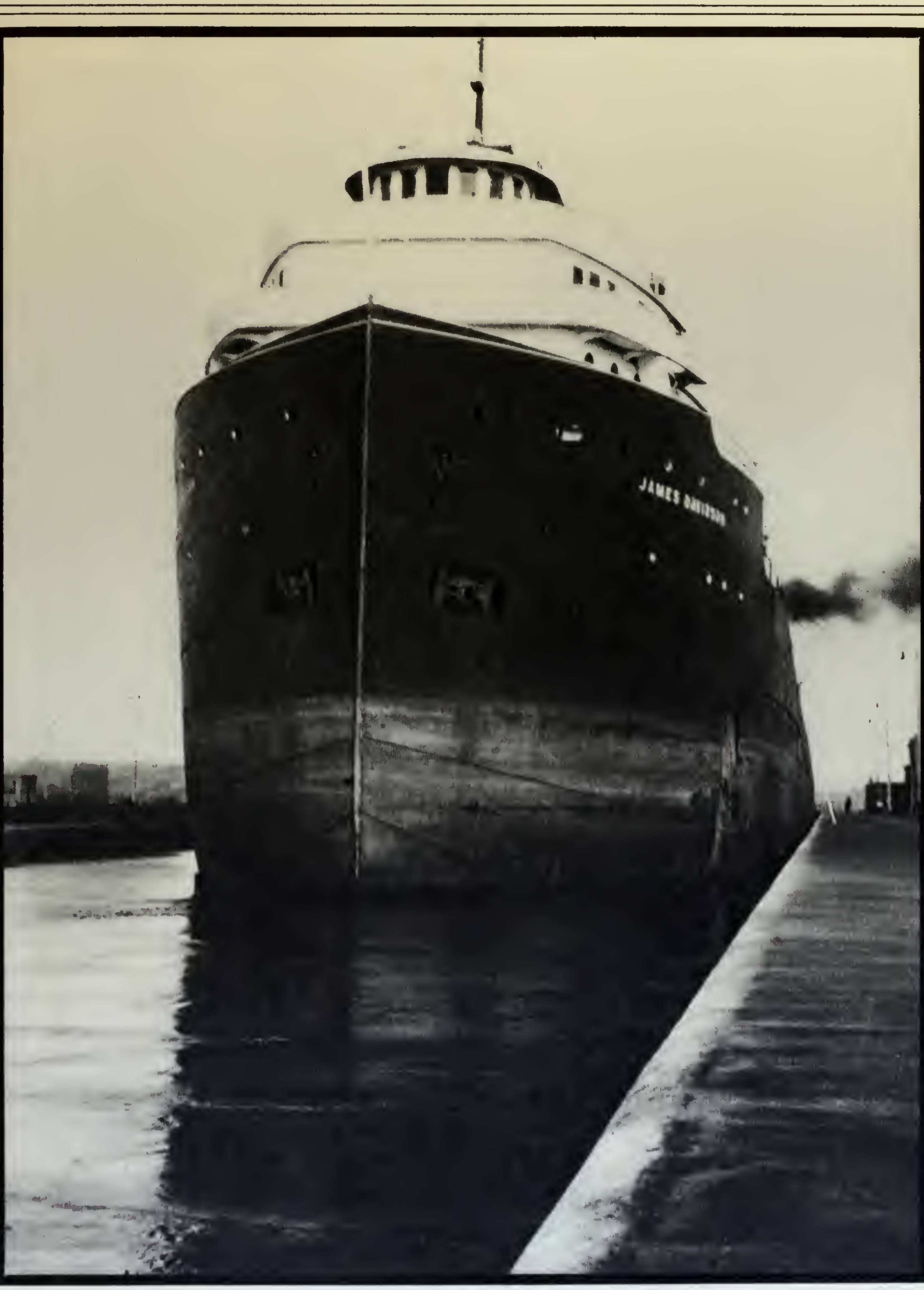


HEAPED ORE, READY FOR THE FURNACES OF CLEVELAND STEEL MILLS

Trade Routes Across the Great Lakes

A Portfolio of Photographs of Iron, Steel, Coal and Ships

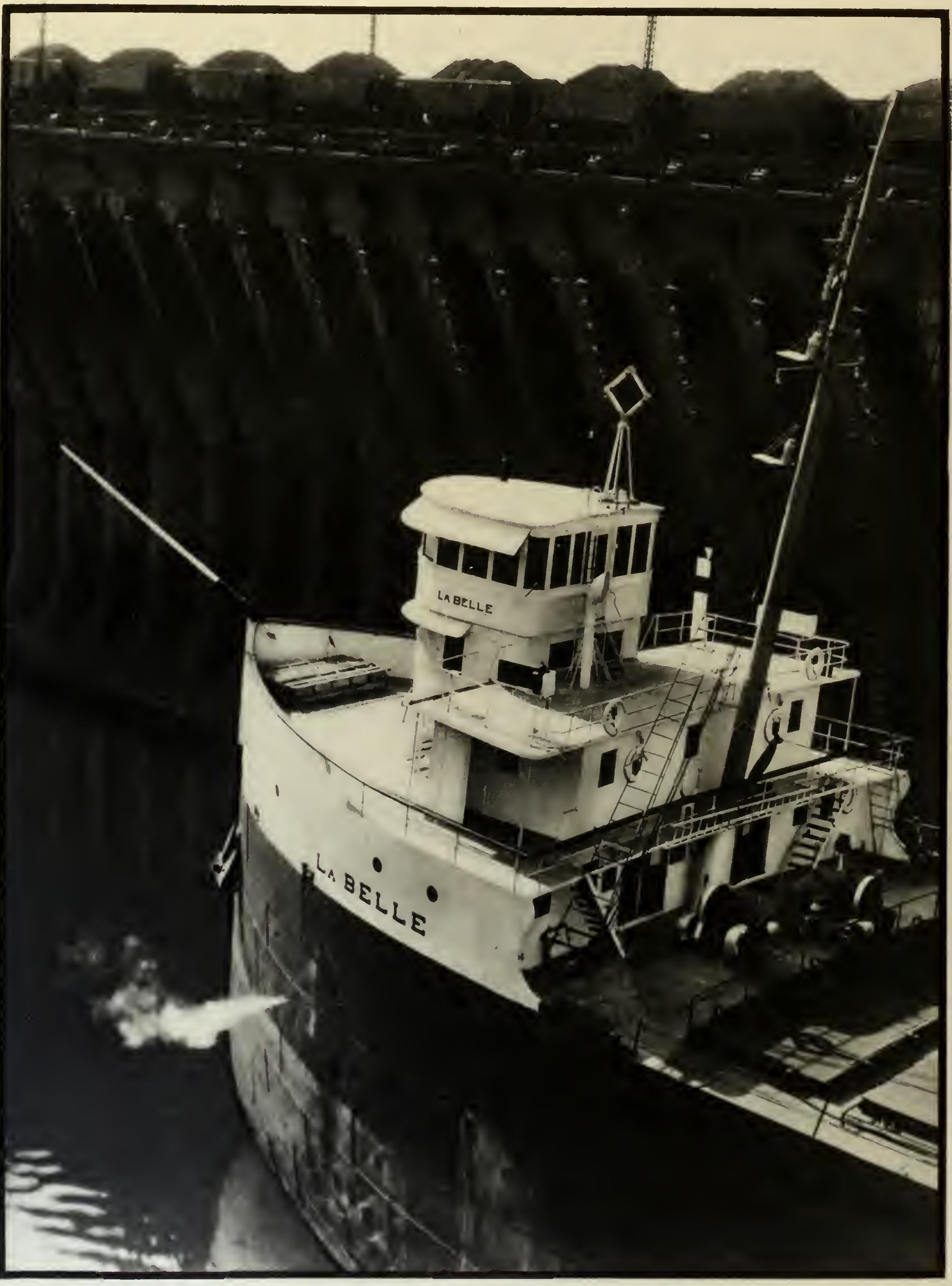
By Margaret Bourke-White


JAMES DAVIDSON

THE FREIGHTER *JAMES DAVIDSON* GOES UP THE LAKES, TRAVELING LIGHT

ELECTRIC WELDING (8000° FAHRENHEIT) AT THE LINCOLN ELECTRIC CO.

UNLOADING COAL FROM A FREIGHTER AT THE BERWIND DOCKS, DULUTH


LA BELLE
LA BELLE

THE *LA BELLE* ARRIVES AT THE GREAT NORTHERN DOCKS (DULUTH) TO TAKE ON A CARGO OF ORE

Radio Corporation of America

An ironic decade.

IT IS the genius of comedy to take a situation and deftly turn it inside out. Even now the curtain is just ringing down on the first act of a high comedy of industry with a magnificent upset of everyone's calculations.

A brief obscure prologue preceded the main act. The time is 1915, the place a room in the old Holland House, New York, occupied by Senator Guglielmo Marconi. At his request, a young vice-president of the General Electric Co. named Owen Young has come for a talk on radio communication. The Senator is telling Mr. Young that he is ready to place with the General Electric Co. a $5,000,000 order for preferential rights to its new high frequency alternator developed by Dr. Ernst F. W. Alexanderson—on which, it seems, the whole future success of radio communications is dependent. Mr. Young conceals his astonishment and withdraws resolving to investigate the commercial possibilities of such alternators.

The main act began in stirring circumstances, with Woodrow Wilson sitting in the Hall of Mirrors at Versailles. It was now 1919 and the great American President, with eyeglasses perched on his Louis XIV nose, was surrounded by the powers of the world. All his eloquence was bent on making them subordinate the narrow claims of nationalism to the claims of humanity, of internationalism, and of the League of Nations. But even as he sat there the small voice of patriotism called to him, and the spirit of nationalism, not dead, reawoke in his bosom. So he returned one evening to his residence in the home of Prince Murat, where Mrs. Wilson waited for him, and instructed Rear Admiral William H. G. Bullard to proceed immediately from the peace conference at Paris to the United States with a message for this same Owen Young.

Berenice Abbott

DAVID SARNOFF—PUCK OF RADIO

The situation was this. For years the British had been masters of world communication. Not only did they own most of the transoceanic cables but they had almost a monopoly on gutta percha with which cables are insulated. What was more, they had been first in the field of radio. Marconi's Wireless Telegraph Co., Ltd. and its subsidiary, Marconi Wireless Co. of America, possessed a well-rounded collection of patents. But among American companies patents were so scattered that it was almost impossible to assemble a sufficient quota to make an efficient sending and receiving radio set. In consequence of the British control of communications, an American firm wishing to bid on a foreign contract, or to give orders to a sea captain abroad was practically obliged to send its messages through British hands—cable or radio—with the possibility of delay or unfair use advantageous to British competitors.

Woodrow Wilson in Paris saw an opportunity to loosen the British grip by obtaining a share of the radio business before it, too, had been lost forever. He knew that the Marconi company, after the interruption of the war, was pressing General Electric for a resumption of the bargain over the Alexanderson alternator which grew out of the Holland House meeting four years before. Practically speaking the General Electric Company had but one market for its machine: to sell to the Marconi company would have been ordinary good business.

Immediately upon his arrival in the United States, Rear Admiral Bullard, as Director of Naval Communications, met the officers of General Electric and told them that they would do an irreparable damage to American business if they sold the alternator to the British. It was all very much like an American version of Parker's play *Disraeli*, or how the Suez canal was saved for England.

The General Electric officials, to whom Rear Admiral Bullard appealed, were patriots and business men, too. They asked what they were to do with the alternator. They had no other immediate market for it. Its development had cost them $1,500,000. It was not a bauble to be left lying around the laboratory. The British negotiations promised a fair return on their investment. The answer of Rear Admiral Bullard was that an American radio company should be formed—capable of meeting the English on equal terms. After consideration,

[*Continued on page 84*]

The Atlantic (Titanic) Sinks

BEFORE midnight on April 14, 1912, the S.S. *Titanic*, racing westward on her maiden voyage at full speed (despite warnings that ice was nearby) crashed into an iceberg off the Great Banks. At first few passengers understood; many danced on. To suppress panic, the ship's officers spread a false sense of security.

At 2:20 on the morning of April 15, with little immediate warning, the great ship nosed under the calm and icy Atlantic waters, carrying 1,513 people to death. Her band, in life preservers, played lively tunes, and finally, "Nearer My God to Thee." At daybreak arrived the first rescue ship, the *Carpathia*, whose skipper, Rostrom, now captains the *Berengaria*. She gathered up some 711 men and women in lifeboats.

A wireless operator named David Sarnoff was in his high-powered station atop the John Wanamaker store in New York when Jack Phillips, 24-year-old wireless operator on the *Titantic*, flashed out his first call: "Come at once. It's C(ome) Q(uick) D(anger)." Later President Taft ordered all other stations silent, to allow uninterrupted communication between Operator Sarnoff and that far-off catastrophe. With ear phones clamped tight over his head, his very soul projected into the black heart of that marine disaster, he could not hear Phillips' plaintive messages to the *Carpathia:* "Please hurry . . . She's taking water . . . It's up to the boilers . . . We are sinking bow first . . . Send help." The old C.Q.D. call was alternated with the then new distress signal S.O.S. Gradually the *Titanic* messages died away as her power plant failed. Great confusion in the air followed. Via the *Olympic*, the *Carpathia* relayed in its list of *Titanic* survivors to Operator Sarnoff who held his post for three days and three nights —72 hours. Wireless then was not the crisp precise thing it is today: Sarnoff's ears ached with the strain of catching the blurred crackly code.

It was in this period of wild uncertainty that Carl Van Anda, managing editor of the New York *Times*, acquired journalistic renown by organizing his entire staff in preparation for a huge disaster story on the first vague rumor, while his competitors were discounting the reports about the *Titanic*. The detailed story of her sinking came five days later, with the arrival in New York of the silent *Carpathia*.

The *Titanic's* sinking—and Sarnoff's part in it—established for all time the primacy of radio as an essential device for sea safety. Soon thereafter Congress ordered all sea-going ships carrying fifty or more passengers to equip themselves with wireless sets.

Here are presented stills from the new moving picture, "Atlantic," produced by the British International Co., most prolific of the struggling English cinema concerns. Except for a piffling and irrelevant love story, the British film attempts to give an intelligent paraphrase of the greatest of peacetime sea disasters. In it the band plays from the tilting deck. Crowds surge wildly under the shadow of sudden death. The captain releases his crew—"Every man for himself." From the flooding engine rooms the "black gang" struggles vainly up the narrow ladder to the deck and possible rescue.

The producers show Phillips staying in his wireless coop till water rises above him. Phillips, however, left when his power failed, clung for a time to a lifeboat. But his end was the same.

URLINGAME
PUBLIC
LIB.

© H. & E., Wide World

A DREAM OF HIS . . .

LIGHT BLACK
DARK BLACK

Paramount Pictures

. . . MADE POSSIBLE THE RISING OF THESE STARS

Vice-President Young of the General Electric said that he thought it could be done.

And done it was. General Electric officials met with important holders of other American radio patents—American Telephone & Telegraph Co., United Fruit Co. (which had developed a good radio system in connection with its Caribbean service) and later with the Westinghouse Electric & Manufacturing Co. Together they determined on a pool of their patents as the necessary foundation for an American radio company strong enough financially and technically to compete with the British. Possession of the all-powerful Alexanderson alternator, then the "heart" of the great New Brunswick, N. J. wireless station, together with the recently acquired British interest in the Marconi Wireless Telegraph Co. of America, gave General Electric the dominant right to sire this new company.

Thus was born the Radio Corporation of America. Its working capital was represented by preferred stock issued for cash to the participating companies, which received common stock in exchange for their radio patents. Government officials took an active interest in the new company, approved its charter provisions preventing foreigners from ever voting more than 20% of its stock, and sent Rear Admiral Bullard to sit with the Directors as the representative of the Government. President Wilson was well pleased that his idea and the patriotic efforts of his fellow citizens had borne such practical fruit.

So ended the first scene of the act—a British Goliath now faced with a redoubtable American David.

A brief *entr'acte* indicated the importance of the youthful Radio Corporation in the field of world communications. The time is 1921; the scene, Paris. Thither Mr. Young summons the heads of the Marconi's Wireless Telegraph Co., Ltd., the Compagnie Générale de Telegraphie sans Fil of France and the Gesellschaft für Drahtlose Telegraphie m. b. H. of Germany. It is the first post-war conference at which French and Germans meet as equals. The German radio executives glare at the French wireless men and the Frenchmen glare back at them, neither speaking to the other until a sharp difference of opinion precipitates a dispute between them, breaking the hostile silence. South America offers enough radio business for only one company; four companies of four nations in the same field mean heavy losses for all. Mr. Young suggests the solution: formation of a new company—the A. E. F. G. Consortium—for South American communications, in which each nation will own a quarter share and be represented by two directors. A ninth director is to be impartial chairman. The suggestion is adopted. The United States, thanks to Mr. Young's initiative, is permitted to contribute the chairman, who is Thomas Nelson Perkins of Boston.

There, one might assume, is the complete background of the Radio Corporation—its patriotic origin, its quick development to a world-influence in the field of wireless communications, its long substantial shadow falling unmistakably into the future. Yet it is nothing of the kind. The genius of electricity was the motivating force behind this international comedy and the genius of electricity is notoriously unpredictable. Almost at once it began to move its creatures about on the public stage until it found itself going in every direction with almost bewildering speed. A hundred surprises crop out as the impish spirit of electricity twists the Radio Corporation's serious destiny into a fantastic *Midsummer Night's Dream.*

The first unexpected diversion came when the government-fostered Radio Corporation incurred the suspicion and sharp antagonism of its foster parent. The Federal Trade Commission began to investigate the loud complaint of the "independents" that the Radio Corporation was a danger to the radio industry of America because of unfair competitive methods. The charge against it was the very essence of its creation—the patents which had been pooled to bring it to life. With that as a starting point, the Federal Trade Commission subjected the Radio Corporation's fabric of organization to the most searching scrutiny.

This controversy of the Government with its fosterling ran at great expense through four and one-half years and eighteen thousand pages of dialogue and testimony. Only at the close of 1928 did the Federal Trade Commission dismiss its complaint, having failed to make even a prima facie case against the Company. Nevertheless the parent continues to eye the child narrowly.

Action as well as dialogue was provided in the comedy's next turn from its charted course. On November 2, 1920, more than a year after the founding of the corporation, the first radio broadcasting station, KDKA (Westinghouse) at Pittsburgh, was opened. There was double damage done that day: a new thing had been begun that was to make the chief interest of the Radio Corporation something quite other than what had been in Woodrow Wilson's mind that day in Paris, and the program which gave broadcasting its auspicious start was the election returns showing that the Harding landslide had buried the League of Nations, another creature of the Hall of Mirrors at Versailles.

If Woodrow Wilson's thoughts that evening had not been too pre-occupied, he might with a prophetic ear have heard the strange voice his patriotic foster child would develop in the coming decade. He might have marveled at its rhapsodizers, songsters, syncopators, at its politi-

[*Continued on page 128*]

Color in Industry

The Anglo-Saxon is released from chromatic inhibitions. With spectrophotoelectric curves he prepares to outdo the barbarians.

CONSIDER, for a moment, a red bed. Red is a common color and a bed is a fundamental article of furniture. Yet the combination of the two had, until very recently, almost a startling effect. Grandmother, perhaps, would have thought a red bed immoral. Mother would have considered it at least peculiar. Nearly anyone in, say, 1920, would have expected to find only a Red in a red bed.

Yet, within the past five or six years, thousands of red beds have blossomed in corresponding thousands of American bedrooms. Also have arrived blue beds, green beds, yellow beds, purple beds, mauve beds, and blue, green, yellow, purple and mauve bedspreads to cover them. There is now nothing startling about color in the bedroom—although architecture remains drably monotone. For during the past few years a great pail has up-ended itself over the American scene, has splashed our household goods and gods with a rich, warm stream of flat, bright color.

Remember, for contrast's sake, the home of 1920 and of 1925. Here there were chiefly natural colors. Kitchen and bathroom were a porcelain and surgical white. Furniture was in natural wood tints, surfaced with colorless finish. The stove was black. Faucets were metallic. Things were, so to speak, as God made them—each object deriving its color from the material of which it was fashioned. Even the family car was black, or some dull, dark color allied to blackness. In the nursery, perhaps, Junior possessed and treasured a blue horse. Only in the nursery, however, was such a contradiction of nature permissible.

Turn now to the thoroughly painted home of 1928. Here so utilitarian an object as a sink was purchased from a color range of T'äng Red, Orchid of Vincennes, Royal Copenhagen Blue, Ivoire de Medici, St. Porchaire Brown, Rose du Barry, Ionian Black, Clair de Lune Blue, Ming Green and Meissen White. In the cellar stood a Redflash Boiler, more crimson than the

THE THIRST FOR COLOR AFFECTED THESE

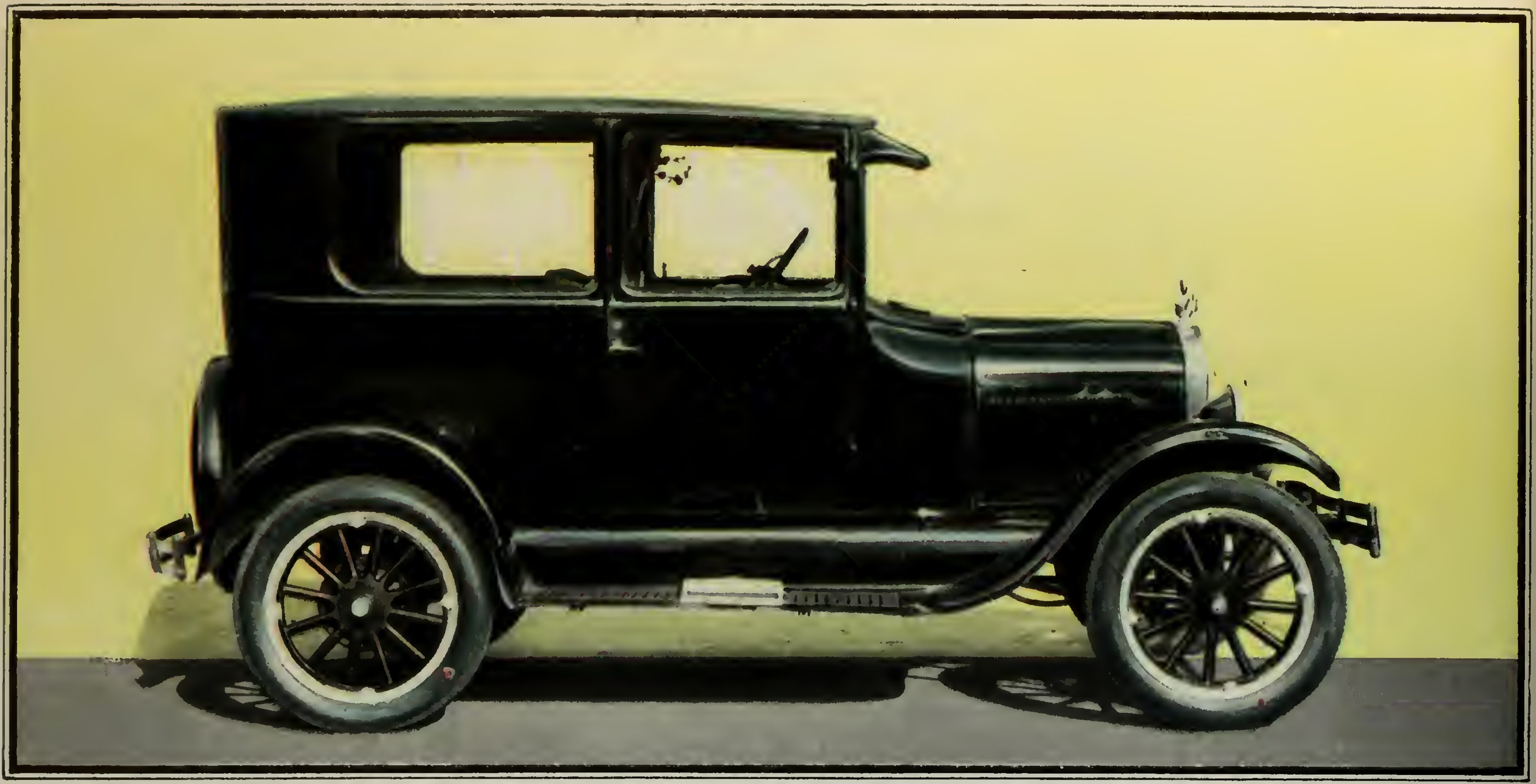
NOT ONLY DISHES, BUT POTS AND PANS ARE BEDECKED

THE OLD BLACK CAMERA IS NOT WHAT IT USED TO BE

COLOR MAY MAKE CHEERFUL EVEN AN ALARM CLOCK

Courtesy Nat'l Cash Register Co., L. C. Smith & Corona Typewriters, Inc.

THIS PAGE, AND THE NINE PAGES FOLLOWING, BEAR BRILLIANT WITNESS TO THE ADVENT OF COLOR TO AMERICAN INDUSTRY. THE COLOR CAMERA HAS HERE RECORDED THE INDUSTRIAL SPECTRUM, RANGING FROM YELLOW ALARM CLOCKS TO BLUE LOCOMOTIVES



MR. FORD CLUNG TO BLACK, BUT CHEVROLET SALES CONTINUED TO MOUNT

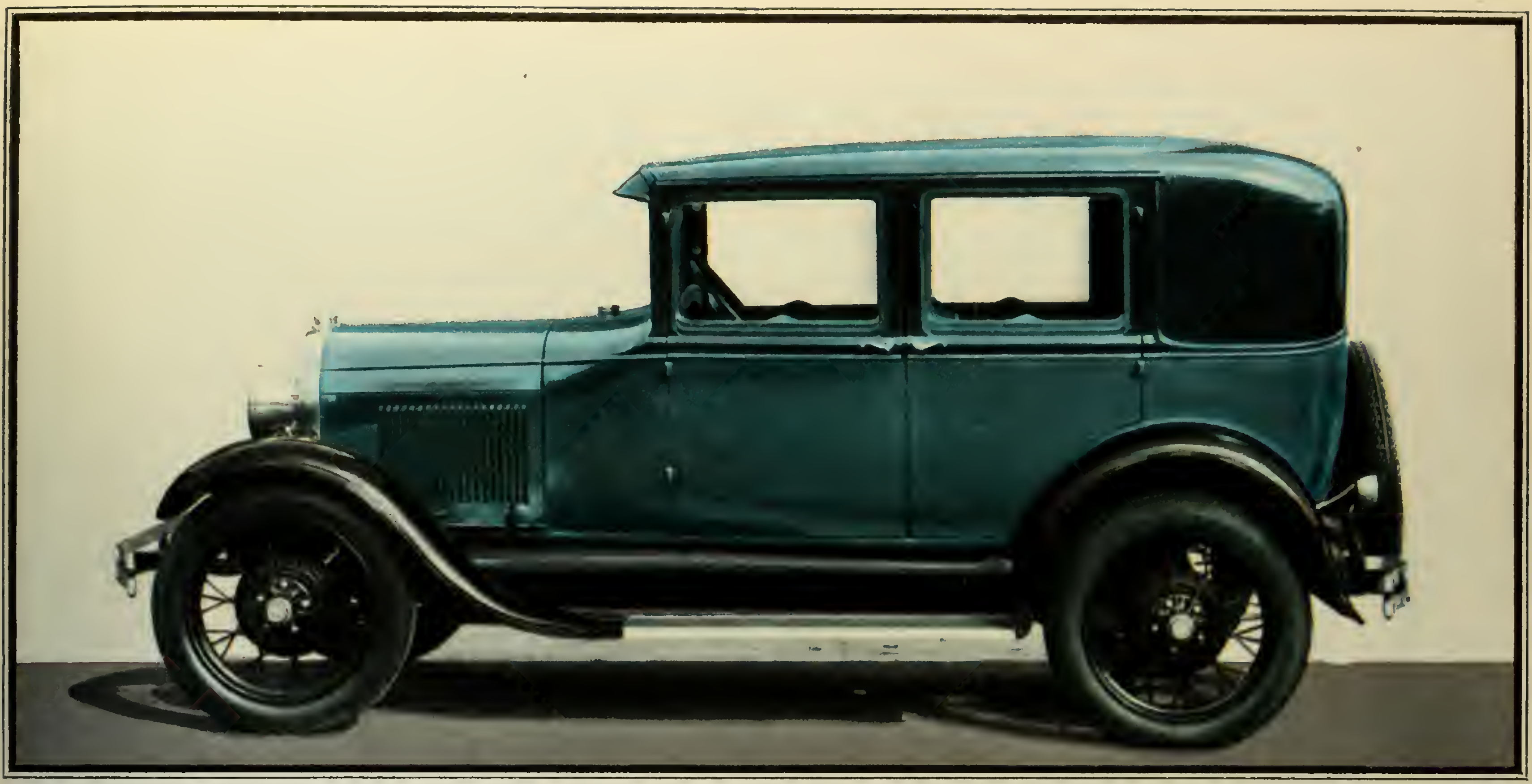
flames in the adjacent furnace. On the door of the orange refrigerator was perched a bright green parrot. Not only the dishes, but the pots and pans were decked in bright gay tints and tones. A green-tiled bathroom was set off with green tub, green towels and, monstrously enough, green toilet paper. For afternoon tea there were blue glasses and a yellow cloth. A yellow alarm clock—a cherry garbage can—a scarlet typewriter—surfaces had turned suddenly into palettes. Nor had such staples as chairs, desks and tables missed submergence in color's rising tide. As for automobiles—the autumn woods showed no more varied or more brilliant plumage.

The aesthetic value of all this decoration was, in many instances, open to question and, in its more extreme vagaries, color suffered from the fevered and fleeting qualities of a fad. Yet in a country so long committed to the proposition that where there is beauty there is decadence, the acceptance of color was undoubtedly significant from the standpoint of old traditions being abandoned and old suppressions being released. Turning from color in the home to color outside the home—from color domestic to color industrial—it is easy to see how in the past, and even in the present, industry has used color chiefly for some utilitarian purpose. Identification, attention, and standardization—these have been the trinity of causes on which the use of color has been based.

As long ago as the days of the Civil War, when the first Atlantic & Pacific grocery store was opened in New York, a shrieking red set it off from neighboring emporiums. Perhaps it is from this precedent that chain store units have so generally adopted a distinctive decorative effect—certainly all the Great Atlantic & Pacific Tea Company's stores are still as red as their first parent; red, too, are the stores of Woolworth and of Kresge. A more unusual instance of color identification is the blue coal of the Delaware, Lackawanna & Western Coal Co. Gasoline and motor oil makers have produced the yellow of Texaco, the red of Socony Special, the blue of Sun Oil Co., this last effort having partially failed of its purpose when Pure Oil also marketed a blue gasoline. In full page newspaper advertisements Sun Oil complained: "Is it not a fair assumption that no other refiner would follow our lead and market a *blue* gasoline except with intent to deceive?"

Violet, ivory & gold

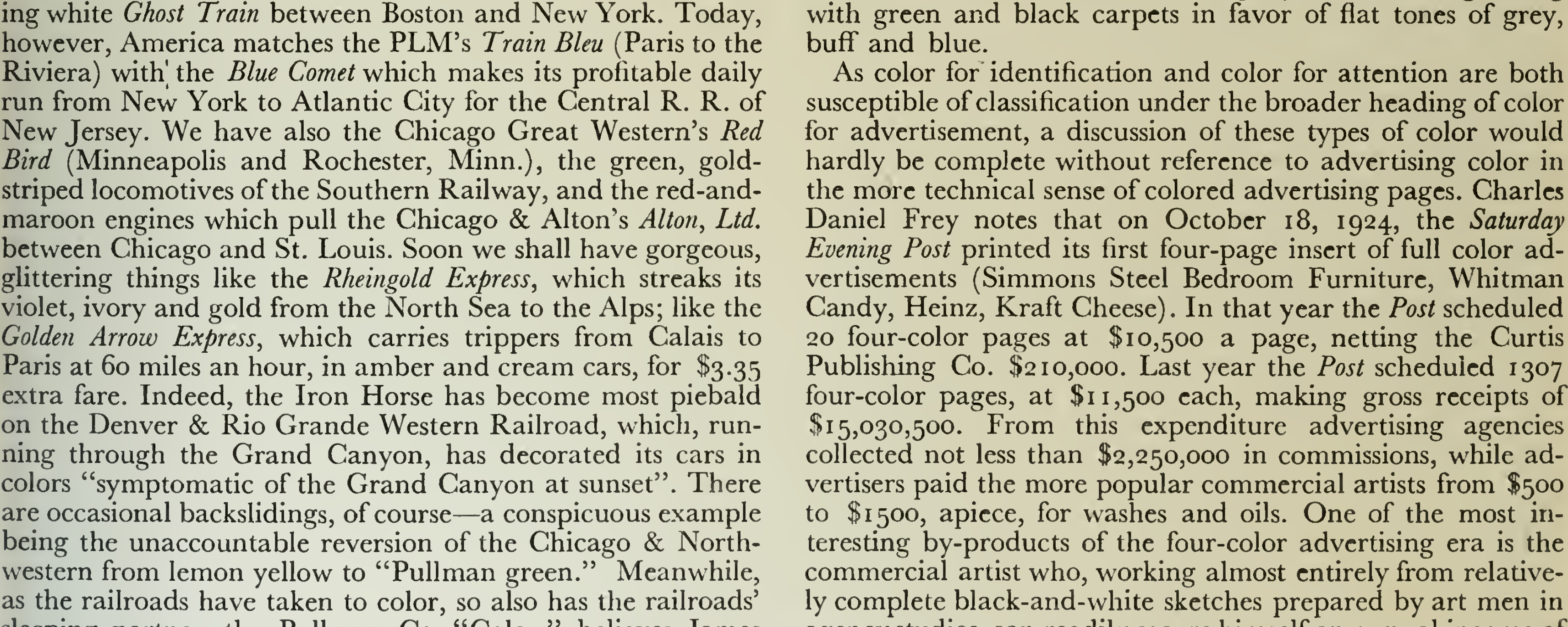
Allied to the use of color as a means of identification is the use of color as a means of securing attention. Conspicuous, for example, are the planes of Colonial Airways Corp.—their bright blue bodies and bright orange wings standing sharply clear against the blue and grey of the sky or the brown and green of the earth. In a similar manner many of the railroads have designed special colors for their crack expresses. It is a



UNTIL WITH THE NEW MODEL A, MR. FORD MADE A COMPLETE SURRENDER TO COLOR

long time since the old New England Railroad ran its gleaming white *Ghost Train* between Boston and New York. Today, however, America matches the PLM's *Train Bleu* (Paris to the Riviera) with the *Blue Comet* which makes its profitable daily run from New York to Atlantic City for the Central R. R. of New Jersey. We have also the Chicago Great Western's *Red Bird* (Minneapolis and Rochester, Minn.), the green, gold-striped locomotives of the Southern Railway, and the red-and-maroon engines which pull the Chicago & Alton's *Alton, Ltd.* between Chicago and St. Louis. Soon we shall have gorgeous, glittering things like the *Rheingold Express*, which streaks its violet, ivory and gold from the North Sea to the Alps; like the *Golden Arrow Express*, which carries trippers from Calais to Paris at 60 miles an hour, in amber and cream cars, for $3.35 extra fare. Indeed, the Iron Horse has become most piebald on the Denver & Rio Grande Western Railroad, which, running through the Grand Canyon, has decorated its cars in colors "symptomatic of the Grand Canyon at sunset". There are occasional backslidings, of course—a conspicuous example being the unaccountable reversion of the Chicago & Northwestern from lemon yellow to "Pullman green." Meanwhile, as the railroads have taken to color, so also has the railroads' sleeping partner, the Pullman Co. "Color," believes James Keeley, Pullman's Assistant to the President, "is becoming more and more of a selling urge." The urge has resulted in a variation from the standard mahogany and walnut graining with green and black carpets in favor of flat tones of grey, buff and blue.

As color for identification and color for attention are both susceptible of classification under the broader heading of color for advertisement, a discussion of these types of color would hardly be complete without reference to advertising color in the more technical sense of colored advertising pages. Charles Daniel Frey notes that on October 18, 1924, the *Saturday Evening Post* printed its first four-page insert of full color advertisements (Simmons Steel Bedroom Furniture, Whitman Candy, Heinz, Kraft Cheese). In that year the *Post* scheduled 20 four-color pages at $10,500 a page, netting the Curtis Publishing Co. $210,000. Last year the *Post* scheduled 1307 four-color pages, at $11,500 each, making gross receipts of $15,030,500. From this expenditure advertising agencies collected not less than $2,250,000 in commissions, while advertisers paid the more popular commercial artists from $500 to $1500, apiece, for washes and oils. One of the most interesting by-products of the four-color advertising era is the commercial artist who, working almost entirely from relatively complete black-and-white sketches prepared by art men in agency studios, can readily secure himself an annual income of $40,000, $50,000, $75,000, and up. Color in advertising had its genesis in the attention value of the color page as opposed



TRAVEL AIR SIX-PLACE CABIN MONOPLANE AT ROOSEVELT FIELD, L. I.

to what were then the prevailing black-and-white pages. It received a tremendous impetus, however, from the spreading vogue of colored merchandise, for obviously the manufacturer featuring color in his automobile, his bathtub or his crockery would use color pages for the appropriate and accurate representation of his product.

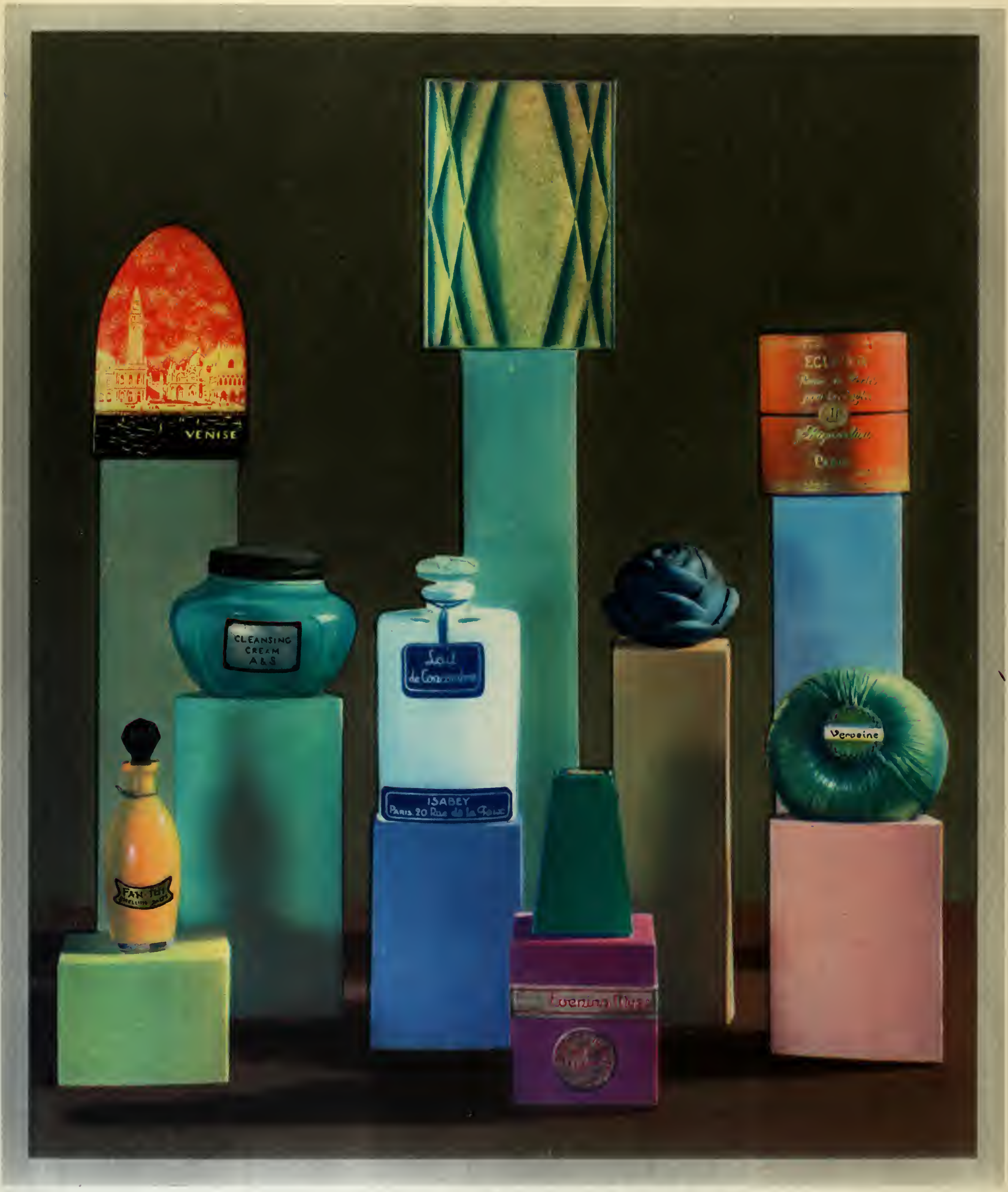
It may perhaps be argued that in all the color manifestations thus far discussed the element of beauty was not entirely absent. Nevertheless, the element of beauty was certainly (with the possible exception of the renovated Pullmans) incidental. Aesthetic considerations, however, did move the Consolidated Gas Company to paint its waterless gas holders (on Manhattan and Long Island) in from four to fifteen colors, shading from a dark base to a light crown. They are barely visible on the average day. As nearly as any tanks with a capacity of 15,000,000 cubic feet may be made elusive, chameleon-like objects, these examples of industrial camouflage have disappeared into their surroundings.

Custom & rule

There is another large division of industrial color from which aesthetics are entirely missing. This division is the standardization division—well illustrated by the prevailing tendency to make tonics red (perhaps through the suggestion of the red-blooded results) and indigestion remedies green. Violet-scented soap, candy and perfume are usually violet in color; synthetic cherry jam and orange drinks are generally closer to the natural fruits in color than in taste. Quintessence of standardized color is found in the Bureau of Standards in Washington, where a colorimetry laboratory fixes standard colors for such commodities as tobacco, bricks, chocolate, flour, meats, honey, false teeth, tomatoes. In each of these cases, it is custom which dictates color and standardization which turns custom into rule.

It will therefore be observed that color in industry did not reach and has not reached the proportions of an epidemic, even though the dots of color on the American scene are undoubtedly increasing. Color in the home, however—color as applied to the daily life of the normal citizen—was unquestionably a vogue and has continued to exert a definite and a powerful influence. The young housewife of today is called upon to pronounce aesthetic judgment upon such varied and extraordinary objects as wheelbarrows, washstands, stoves and ice cubes. It has become possible for her to say: "I hate that double boiler", or "I think that bathtub is beautiful". It is perhaps true that an object such as a garbage pail should not appropriately be tinted like the flowers of the field and it is perhaps peculiar that bathrooms should be so reminiscent of Solomon in all his glory. On the other hand, there is in color a warmth and a vividness, a suggestion of life and movement, a variation from drabness and monotony. Certainly color has fitted the tempo of the times. Striped tables were appropriate to short skirts. Yellow desks had an affinity for bobbed hair. Nearly everyone likes bright colors. And, in this post-war period of broken precedents, of weakened traditions,

THE BLUE COMET (C.R.R. OF N. J.) MAKES ITS PROFITABLE RUN BETWEEN N. Y. AND ATLANTIC CITY


VENISE
CLEANSING CREAM A&S
Lait de Concombre
ISABEY Paris. 20 Rue de la Paix
Verveine
FAN-TAN
Evening

MR. ARTHUR S. ALLEN ARRANGES A DISPLAY OF BRIGHTLY-COLORED SOAPS AND PERFUMES, USING THE MATHEMATICAL RELATIONSHIPS BETWEEN COLORS TO GIVE EACH SINGLE EXHIBIT ITS MAXIMUM EFFECT. ALONG SUCH LINES, HE BELIEVES, WILL WINDOW DISPLAYS DEVELOP

CORRECT WEIGHT ONE CENT

Courtesy Auto Sales Co.
MEASURED COLOR APPLIED TO MEASURED WEIGHT

it is not surprising that old chromatic inhibitions should be shaken off and that the American people should gratify its instinct for color by bathing itself in a torrent of brilliant hues.

Fords & towels

Meanwhile, aside from cultural considerations, the color movement produced a notable economic activity. The most dramatic example of the economic strength of the color trend was of course evidenced in Henry Ford's futile opposition and ultimate capitulation to the movement in which General Motors did much to lead the way. Out of the war sprang one of industry's most ardent colorists, G. M.'s able Capt. H. Ledyard Towle. "I can make a stubby car look longer and lower," he announced. Other manufacturers, willingly drifting with the color stream, adding, indeed, the power of advertising to its velocity and energy, profited notably. For a long time the plumber had been selling mere sinks. Now he was selling Beauty. For a long time the maker of towels had dealt in a product standardized in white. Now he was able to attract the eye, and the pocketbook, with towels of every hue. In countless department stores countless salespersons explained that this yellow pot, that purple pan, were indeed essential ingredients to the contemporary home. In a suddenly kaleidoscopic world, color had become a master salesman, a distributor extraordinary.

Particularly active were the paint makers. Already E. I. du Pont de Nemours had developed Duco, a quick-drying lacquer which supplied the finish to almost all General Motors automobiles and many cars of other makes. The same qualities of easy application, fast drying and the formation of a hard, brilliant surface which made Duco so useful to the automobile maker recommended it also to the home-decorator. Therefore not only the du Pont company, but Sherwin-Williams, Devoe & Raynolds, and many a smaller paint-maker began pouring lacquer over the suddenly color-conscious world. Paint-advertising, indeed, developed a vigorous "paint your home" movement. Sherwin-Williams looks forward to the time when each year will see *two* paint jobs on the walls of the house, bright colors for winter and cool colors for summer. Booklets on interior decoration were widely distributed; interior decorators were employed to design kitchens and bedrooms and dining rooms in the new bright colors; housewives everywhere were urged to secure a supply of lacquer and try their hands at revivifying the old homestead. Perhaps not many color neophytes were sufficiently enthusiastic to attempt a complete redecoration, but no doubt a large number of individual pieces of furniture went through the lacquering process. Duco contributed a generous share to the du Pont 1928 net profit of $64,097,798; Sherwin-Williams discovered that reds, blues and greens had become sales leaders in place of the standard and traditional whites and greys.

TYDOL
18
TYDOL

VIVID SERVICE STATIONS MARKET VIVID GASOLINES

CAMOUFLAGE MAKES THIS GAS HOLDER (21ST ST. AND EAST RIVER, MANHATTAN) NEARLY INVISIBLE

Staples v. style

It should be added, however, that a considerable portion of the color sound and fury signified not very much in terms of ultimate profit, particularly for the small dealer. Whenever a staple goes in for style, the ancient problem of novelty versus standardization immediately asserts itself. If a product formerly manufactured in three colors is manufactured in forty colors, total sales of that product are doubtless increased by the color variety. Yet, even if sales in the three original colors are not injured, the dealer has forty additional lines to complicate his turnover. Some of the colors may be partial failures, some may prove to have practically no appeal.

STATE
Maxwell House Coffee
SQUIBB'S DENTAL CREAM
SOUND PICTURES
HEAR SOUND

Around the World was playing at the Hippodrome. Beneath one of its Broadway signs at 45th Street was the ad for *Coronet Dry Gin—Rickeys & Fizzes.* There was insolence in the griffon over the sign *Rector's.* This was in 1908 . . . There has been much rewriting since on Broadway. The Great White Way, still great, is no longer white. At sundown, the polychrome signs blaze their legends for the thousands who seek recreation and the hundreds whose jobs they advertise. Their coruscation troubles New York's sky. From afar off it looks as though part of the city were afire.

All such ugly ducklings exercise an extremely unhealthy influence on total profits an influence which ultimately reacts on the manufacturer's sales. Makers and sellers of women's shoes went through the same process of styling a staple when short skirts put both shoes and stockings in fashion's limelight. The result was an unquestioned increase in unit prices and in gross business, but coupled with a bewildering multiplicity of "numbers" (i.e., styles) many of which were sold, if at all, only at clearance bargains. Staples *do* profit by the addition of a style element, but not when the style element pushes them too far into the novelty field.

It is for this reason that some of the more weird manifestations of color have already disappeared and that there is a present emphasis upon the scientific approach to color.

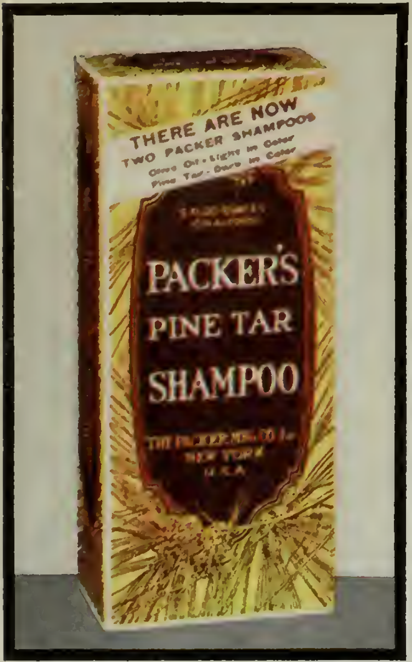
Minor examples of the application of accurate (as opposed to haphazard) color may be observed in objects as disparate as oil tanks and hospitals. Petroleum, gas or liquid, expands with heat; light colors prevent heat absorption; hence tanks painted with white or aluminum paints prevent evaporation, preserve almost intact their allotted quotas of petroleum. The Department of Commerce reports the widespread adoption of colored textiles for hospital decoration (incidentally providing a new use for cotton), while the walls of one Chicago hospital have been painted green in an effort to rest the surgeon's eyes as he looks up from the wound before him.

Hue, value, chroma

But science has come to the aid of color in a manner much more significant and inclusive. Through the analytical color discoveries, about 1900, of A. H. Munsell of Boston, we have learned to describe color in terms of Hue (the color), Value (the amount of light any given color reflects) and Chroma (the

Courtesy James McCutcheon & Co., Cannon Mills, Pepperell Mfg. Co.

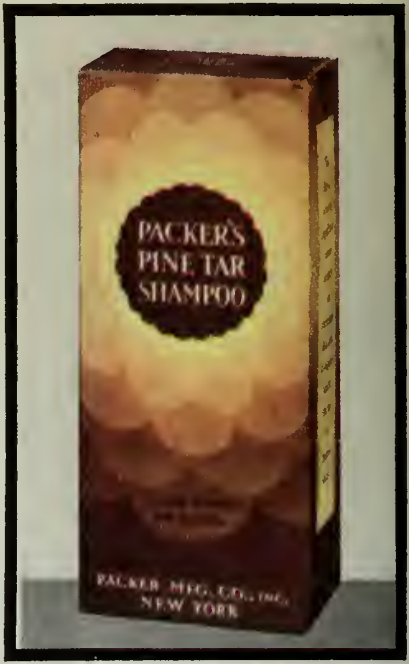
LINEN OF ALL TYPES, FOR DINING-ROOM AS WELL AS FOR BEDROOM, FOLLOWED THE COLOR REVOLUTION


THERE ARE NOW TWO PACKER SHAMPOOS
Olive Oil - Light in Color
Pine Tar - Dark in Color
PACKER'S PINE TAR SHAMPOO
THE PACKER MFG. CO. Inc.
NEW YORK
U.S.A.

SALES INCREASED WHEN THIS PACKAGE . . .

intensity of color). By these three dimensions, we reduce a color wave to a definite entity just as the musician reduces a sound wave to a note in a scale. Within the last few months we have gained an instrument called a color analyser, which measures the amount of red, yellow, green, blue and purple in any material and records on a cylinder the wave length reading of each color.

The mechanization of color judgment is no new notion. Colorists for a long time have mouthed such words as spectrophotometer, colorimeter. But most of these instruments depended ultimately on the human eye and were notoriously weak in breaking down the violet end of the spectrum. The latest instruments, perfected by Prof. Arthur C. Hardy, are a complicated system of prisms, photo-electric cells, filament tungsten lamps, flicker discs. Known as the recording photoelectric color analyser, the instrument has these cardinal virtues: it eliminates the human error in reading color, it analyses correctly for any given angle at which an object is usually viewed (roofs as opposed to dresses), for any amount or kind of light to which an object will usually be exposed (dresses by day, dresses by night), it is efficient for reading the violet end of the spectrum, it is quick (approximately 30 seconds to a


PACKER'S PINE TAR SHAMPOO
PACKER MFG. CO., INC.
NEW YORK

. . . WAS REDESIGNED AND GIVEN PROPER VALUES

Courtesy Standard Sanitary Mfg. Co.

ONE OF THE MOST SURPRISING RESULTS OF THE REVOLUTION WAS THE APPEARANCE OF THE BATHROOM AS A SHOW PLACE reading) though it can submit a piece of material to illumination of 150 lumens per square centimeter (15 times more intense than full sunlight on a clear summer day), there is no danger from heat. (Professor Hardy's own description of his color analyser is printed in the Appendix.)

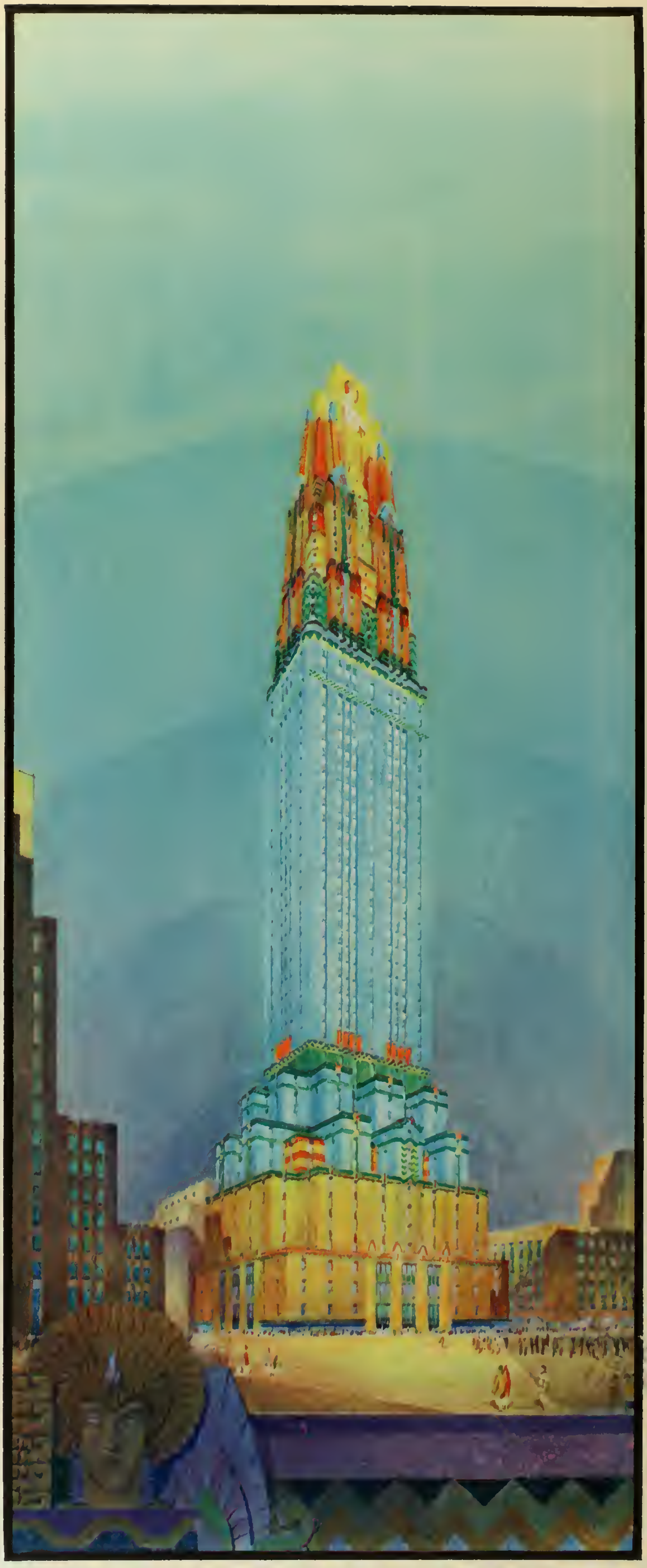
Case-hardened empiricists may sniff at mechanical color contrivances, but the days of their sniffing are numbered. Both the Armstrong Cork Co., largest of U. S. linoleum manufacturers, and the Mohawk Carpet Mills, Inc., one of the largest rug and carpet makers, pay high retaining fees to Arthur S. Allen, who is perhaps the leading American color authority. When Mr. Allen visited the Mohawk Carpet Mills, Inc., he discovered its designers working empirically and haphazardly with thousands of tufts of wool, each of a different color. Gradually he showed them how just as many and as varied color-combinations could be created from 600 tufts, scientifically selected and arranged. Much the same problems are being met in much the same way, by Mr. Allen, at the Armstrong Cork Co. More obvious examples of the application of science to color are seen in the redesigning (with gratifying sales increases) of packages used by the makers of Lifebuoy Soap, Bokar Coffee, Kotex, Packer's Pine Tar Shampoo. Toward the tangible statement, the mathematical expression, the scientific colorist now feels his way. Upon his success or failure in large part depends the nature of the future use of color.

Barbaric towers

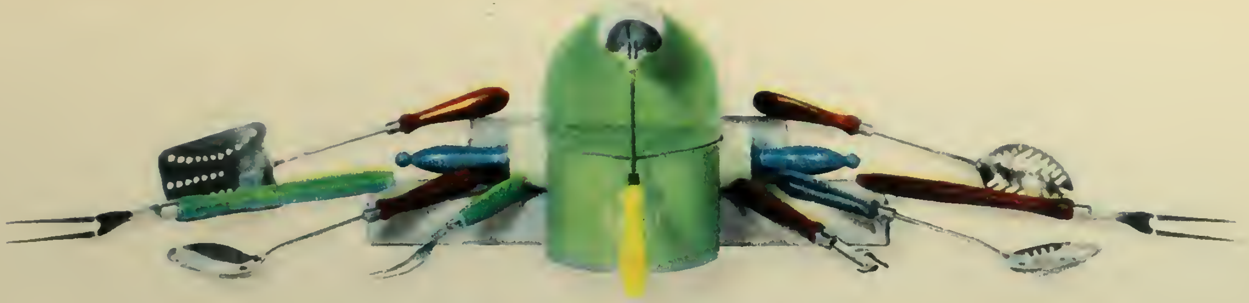
Inevitably, the color wave must leave its mark upon the customs and habits of thought of a people reticent and suppressed in matters of decoration. It was not long ago that Anglo-Saxon poets sang of the "barbaric splendors" of the East, insinuating notes of virtuous disapproval in faultless hexameters. There was something vaguely shocking about temples and palaces which glittered like prisms in the sun. Yet last fall, at the dedication of Yenching College (near Peking), Anglo-Saxon architects enthusiastically applauded the marriage of Eastern aesthetics (blue-tiled pagoda roofs, red lacquer columns, white walls) to Western structural efficiency. And along the business streets of our (more or less) Anglo-Saxon cities arise buildings of industry which begin to bear a not distant resemblance to the "barbaric" East.

There are differences, of course, both in quantity and in quality. Architectural color still resides chiefly in plastic and non-essential ornament, in friezes and mouldings. That color is itself ornament and may be applied boldly to the very structure of a skyscraper, is still held to be advanced and possibly dangerous thinking. Our materials are not like those of the East. We have no supplies of rubies and emeralds with which to stud our columns. But we do have fixed colors in terra cotta which will outlast the pigments (although not the ceramics) of the East by many generations. Curiously enough, this matter of material has had a close association with the question of "barbarism". The most timid Anglo-Saxon can view a red brick building without either a moral or an aesthetic flutter. Put the same building in the same shade of terra cotta, and its acceptance will drop. Put it in some new plastic such as casein (as Mr. Buckminster Fuller would do), and the building will be dismissed as a stunt. The distinctions are absurd, but they have emerged from long familiarities and long distrusts.

The result is that America has not yet seen a major architectural effort in which color has been unreservedly and intelligently used. The office buildings of New York and Chicago and Detroit are flecked with brilliant (and not always attractive) patches; gold-and-black has been exploited in mar-



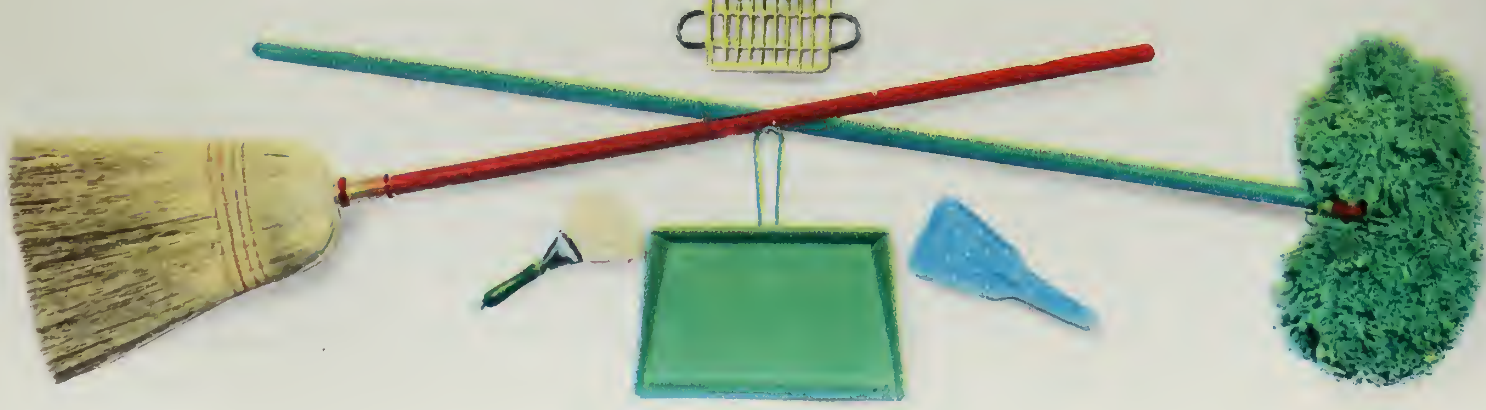
SKETCH FOR A SKYSCRAPER, IN FULL COLORS, TO BE DEDICATED TO FASHION



ble façades and over entire exteriors (the dramatic American Radiator Co. building in Manhattan); colored terra cotta appears on markets (Torrance Market Building, Los Angeles), on warehouses (Reebie Bros., Chicago), on restaurants (Coney Island). But nowhere has a great skyscraper risen, full-bodied, gleaming with color. In spite of Yenching, in spite of beautiful and durable materials, in spite of color-drenched interiors, no builder has been willing to gamble the future of a $15,000,000 building on the conviction that the color wave also scales its outside walls.

No colored skyscrapers in steel and cement, but many in drawing-paper and water-color. Students at art schools submit them as theses; the National Terra Cotta Society reproduces them in workmanlike booklets; architects design them in their spare hours. Fortune prints, upon a preceding page of this article, a picture made for a practical businessman by a practical architect who believes it can be and should be translated into fact. To Architect William Bergen Chalfant of Pittsburgh went Mr. Amos Parrish, New York fashion analyst. He asked for a design for a skyscraper to be dedicated to Fashion. A highly practical and profitable building, faced with standard-sized terra cotta blocks, rising 720 feet above the street, this skyscraper would be the first to discard colored ornament—discard ornament altogether—and rely upon honest color itself to create its emotional effects. It is hard to exaggerate the importance of Mr. Chalfant's practical study for a practical purpose. If the Fashion Building does arise, if it is commercially successful, New York may yet challenge the magnificence, if not the tranquillity, of the New Jerusalem.

Alone among the arts which serve industry, architecture lags behind in the rush to know and use color. When at length it comes into its stride, it can make the most spectacular exhibition of all. The splendid Jain temples of Jaipur, gorgeous with their emeralds and rubies and sapphires, will pale beside a green and orchid tower, vaulting a fifth of a mile into the air. We shall outdo the barbarians. And our poets will applaud.



When Wall Street Buys Orchids

Wall street makes money.

FROM the seaweeds of the East is extracted a substance known as agar, not unlike gelatin in its behavior, useful for varied and rather curious purposes. It is an ingredient of the Chinaman's bird's-nest soup. But it is nearly tasteless and has adulterated many jars of jams and jellies. It possesses some laxative qualities. And it is the one food upon which baby orchids may safely and happily feed for the first six months of their precarious lives.

Because of agar, orchids will some day cost less than the $5 or $10 which is the florist's present price. One of the many perils which beset the orchid has been removed. Before the Cornell University laboratories devised pale, jellied pools of agar, nurserymen planted orchid seeds in fungus. Sometimes it was a friendly fungus, and then the orchid flourished. More often it proved to be an enemy fungus. Then the fungus flourished and the orchid died.

500 ORCHIDS IN EACH GLASS TUBE—THE TUBES ARE FILLED WITH AGAR FROM CORNELL, AND ARE STOPPERED WITH COTTON

AT THE AGE OF 6 MONTHS——100 TO A POT

Now the nurseryman using the Cornell agar preparation may count himself safe for that period when the orchid is still at the figurative breast of its mother. Earlier, in the pod which is the orchid's womb, the embryo is quite safe. It is the mother plant which is likely to die when at length it brings forth, with one splendid gesture of fertility, no less than 750,000 offspring. Later, when the agar-nourished green specks have been lifted on the points of platinum tweezers (most delicate of operations) to a waiting pot of peat moss, life becomes comparatively cushioned and secure. Agar bridges the dangerous age.

Before the dangerous age, the orchid meets many perils. The mother plant may have sickened and died on its long journey from some tropical tree-top to the orchid clearing-house in England. Or, if it escaped death, it may have carried death with it. At Washington, government inspectors watch closely each of the few hundred plants which may be imported under Quarantine No. 37. If on a green leaf appears a minute spot of yellow, the leaf is cut and put under the microscope. If the spot is found to be alive with insects, eating, boring, then only fumigation can save the mother orchid's life and bring it back to health.

From the tropics to England, to Washington, to Bound Brook, N. J.—nearly nine thousand miles of trains and ships. The plant is frail and weary; it must rest before it serves the ends of the Thomas Young nurseries. Here, where more orchids bloom than in any other spot on earth, it is crossed with another, perfect form meeting perfect color. In nine months the pod appears. Thence the seed moves to the pale pools of agar, thence to a pot with 49 of its fellows. Thence, after a year, to a pot with only four others, and finally to an individual pot of its own, where it is nourished by the small, tangled roots of the Royal Palm, called peat moss. From time to time, fresh moss, the cleaning of the plants, the search for the fatal cattleya fly. At length, after seven or eight years of vigilant care, comes the bloom.

These eight years of labor and danger are what lie behind the wholesale price (about one-half the retail price) of the orchid. For in spite of the somewhat precious and esoteric atmosphere with which the orchid is surrounded in the popular mind, the business of growing and selling these flowers is now a highly scientific enterprise. The dilettante collectors, of whom the late Jay Gould was the most famous, have given way to bankers and distributors. True, Mr. Albert C. Burrage, whose great fortune came from two copper companies (Chile Copper Co., Amalgamated Copper Co., both now owned by Anaconda), has the finest private collection in America, while the Duke of Marlborough and Sir George Holford still add to their conservatories in England. But none of these collections compares in size with the 500,000 plants in the nurseries at Bound Brook. And none of these collectors is as important to the orchid as Mr. Arthur H. Bunker, director of Thomas Young Nurseries, Inc.

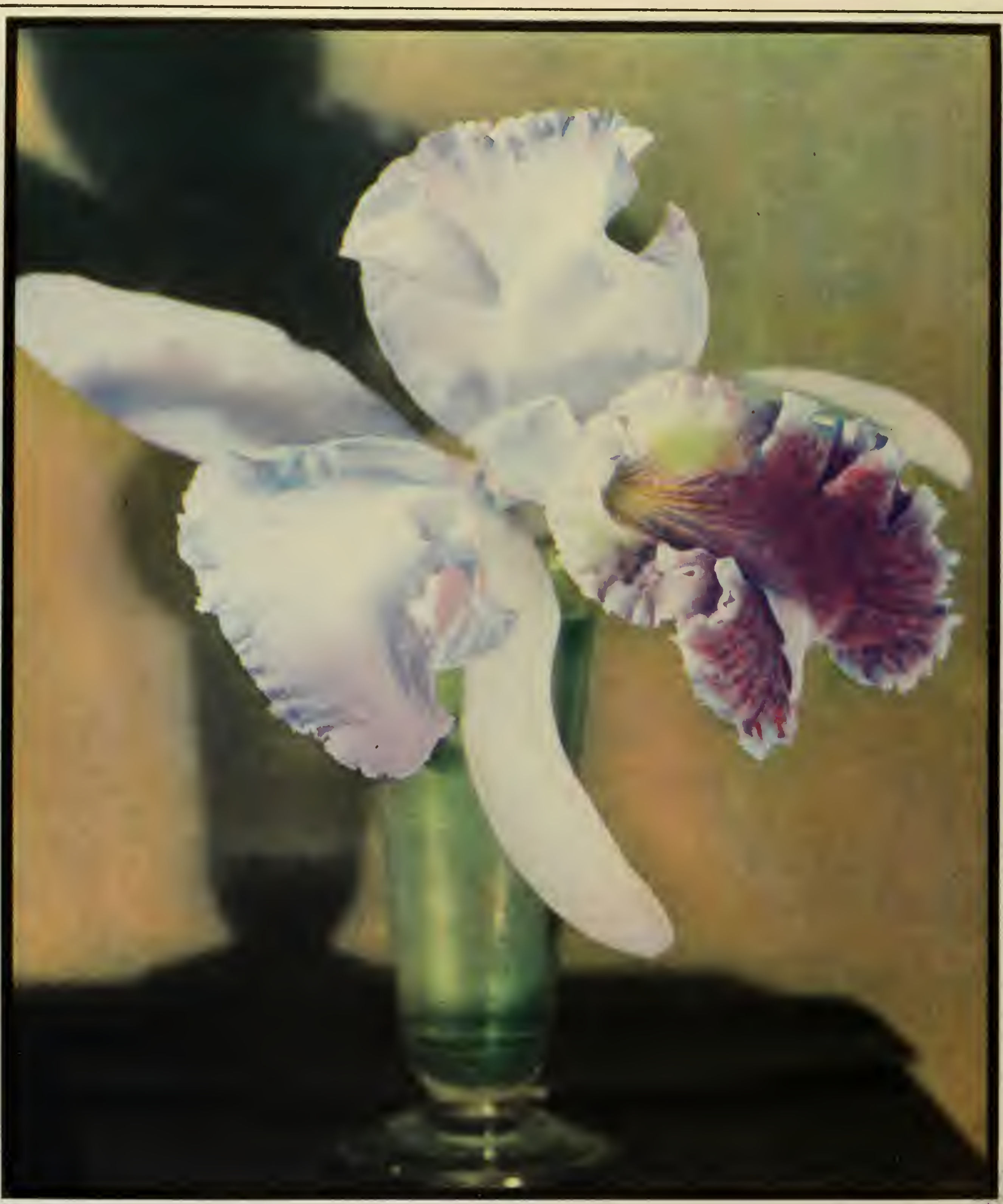
TWO YEARS OLD—EACH PLANT HAS ITS PRIVATE POT

NEW PEAT MOSS FOR FULL GROWN PLANTS

On April 20, 1910, Marjorie Gould married Anthony J. Drexel at the Plaza Hotel in the presence of American society and 5,000 slightly ostentatious orchids. But on March 30, 1929, Bound Brook shipped 11,000 orchids to the Easter parades of New York and Philadelphia. Twenty years ago, the 5,000 were a luxury and an extravagance; the 11,000 of last Easter were the result of mass production.

With Production on such a scale, averaging in normal months 1,000 blooms a day and reaching 3,000 or 4,000 daily in the January season, Distribution cannot lag far behind. The orchid is graded for color, size, form and kind. Sewed in a box with 40 or 50 others, it travels the 35 miles from Bound Brook to New York. If it goes farther—and Bound Brook has picked 1,000 miles as its market radius—each stem has its

[*Continued on page 126*]



Courtesy Thomas Young Nurseries, Inc.

ENID CATTLEYA

LITTLE would the debutante, on whose shoulder this orchid might be pinned, suspect that it is a cross of Mossiae and Warscewiczii, that its full name is Enid Cattleya. It was first shown by James Veitch & Sons in London, England (1898). Its greatest period of harvest is in the fall, from the middle of August to the first of December. Its average retail price: $6.00.

Automobilization of the Orient

Some random notes thereon.

PICTURESQUE and profitable is the exportation of the automobile to the Orient. Fords in the Himalayas, Chevrolets in the Sudan, —filling stations next to temples and punctures in the shadow of the Sphinx. Here, too, waiting for roads to travel on, is the Next Great Market. No point of saturation and a thousand miles between the bumpers. "Ship me somewhere east of Suez," is the current automotive theme song. Below are sketched a few points of interest along the auto-road to Mandalay, a few characteristic items in the colorful and remunerative process of teaching the Orient that sixes do beat fours.

India

With a population of approximately 300,000,000, India has some 125,000 motor cars—about one car for every small town or big village.

India's Satan is Black Yama and Mohammedans consider green an unlucky color. Therefore black cars and green cars are unpopular.

Elephants have caused many auto accidents, but now wear tail-lights, and—like tail-lighted London Bobbies—possess a high visibility.

Indian Rajahs love spot-lights, thus princely cars may carry ten or a dozen lamps.

Religious pilgrimages stimulate traffic, so also does the Hindu taboo upon a man's marriage with a girl from his home-town.

But it is considered unlucky to travel East on Monday, North on Tuesday or Wednesday, South on Thursday, West on Friday or Saturday. Evil days for starting journeys are Tuesday, presaging fire at home; Saturday, foreshadowing loss by thieves; Sunday, portending sickness. Misfortune results from payments or deliveries on Tuesday or Saturday, and all bargaining, buying, selling and paying are suspended at Vishagadi, the poisonous hour of the day.

Taxis in the Dutch East Indies cost $1 an hour. A round, white painted spot distinguishes them from private cars.

Persia

Motor trucks in Persia must compete with camel caravans, which charge only one-half the automobile figure, but cover only 25 miles in 24 hours.

Pilgrimages help Persian motor traffic, as the business man traveling by motor can complete in two weeks a religious duty otherwise requiring two months.

Officers and couriers, who once rode fiery stallions, now travel via sputtering motorcycles.

Persia's almost impassable roads have been improved by Colonel Alfred F. Morris, American engineer formerly employed by the Persian government.

Syria

Henry Ford opened up the Syrian market in 1921, sold 700 Fords. Now about 90% of Syria's 4,822 passenger cars are American built.

Syrian women do not drive and Syrian men consider it beneath their dignity to operate their own cars. Most Syrian automobiles are for public hire. Syrians are notoriously reckless and rapid drivers.

When the Ruwallah tribe of Bedouins breaks camp, the camel of its chief, Nuri Shalaan, ceremoniously leads the caravan. But Nuri Shalaan himself rides in a Buick, driven by a Bedouin chauffeur. Like other Syrian motorists, Nuri Shalaan hangs blue beads on the radiator cap to ward off the evil eye.

Japan

There are almost 50,000 passenger cars in Japan, of which 94% are American made.

Japanese who suspect that a demon may be following them, run in front of motor cars, believe that the closer the car comes to them, the surer it is to run over the demon behind them.

Collisions are amicably settled. First there is much ceremony in the street. Then the driver of the larger car takes the blame, sends the driver of the small car apologies, flowers, fruit, money.

Japanese taxi-men drive American cars. But Japanese traffic keeps to the left. So Japanese taxis carry one driver and one watcher. Japanese taxi men do not take tips.

Passenger car trade has recently been almost stagnant, with many dealers in bad financial condition.

China

There are about 18,000 passenger cars in China. Outside of Hongkong, American makers supply about 75% of Chinese cars. The percentage in British-ruled Hongkong falls to about two-thirds.

The first motor car came to Hongkong in 1910. Others followed and ran down many pedestrians accustomed to dodging only jinrikishas. For some years Hongkong automobiles were restricted to a few roads near the water's edge. The leading foreign car is the (English) Austin.

Total vehicular traffic in Tibet is 1 motorcycle.

In Mukden, citizens heard that American policemen and firemen rode free on common carriers. Therefore they accoutred themselves in miscellaneous uniforms, stormed busses, would pay no fare, disrupted bus service.

In Szechwan, remote Chinese province about the size of Texas and with a population of 50,000,000, motor roads are being opened even before railroads. Existing roads are extremely circuitous as they wind around ancestral graves, lest spirits be disturbed. Gasoline in Szechwan is $2 a gallon.

Exports and Imports

Department of Commerce automobile export figures gave a total of 560,102 automobiles completely built in United States territory and exported during 1929.

At an average price of $750 each, these cars had a money value of some $420,000,000. Automotive exports were valued at about half a billion.

It should be added, however, that a very much larger figure, both of units and of value, is obtained by counting all American-designed cars sold abroad. This total, adding to the Department of Commerce statistics the Canadian-built and foreign-assembled cars of American origin, gave a 1929 sales abroad figure of 1,015,000 cars.

The value of these foreign sold cars, plus parts and tires, was $757,400,000.

Foreign cars imported during 1929 totalled 710.

Although the automobile industry went all over the world for the material out of which its cars were built, the value of the completed automobiles far exceeded the value of the materials imported to make them.

Greatest import was rubber, of which 913,920,000 pounds, valued at approximately $186,000,000, were used. Source of most rubber was British Malaya.

Tin from Malay States, and nickel from Canada were other major imports.

Australia supplied tantalum used in steel-alloys. From Canada came asbestos and from Ceylon came graphite. Chinese tungsten, Spanish cork and German barium are other foreign items in U. S. automobiles.

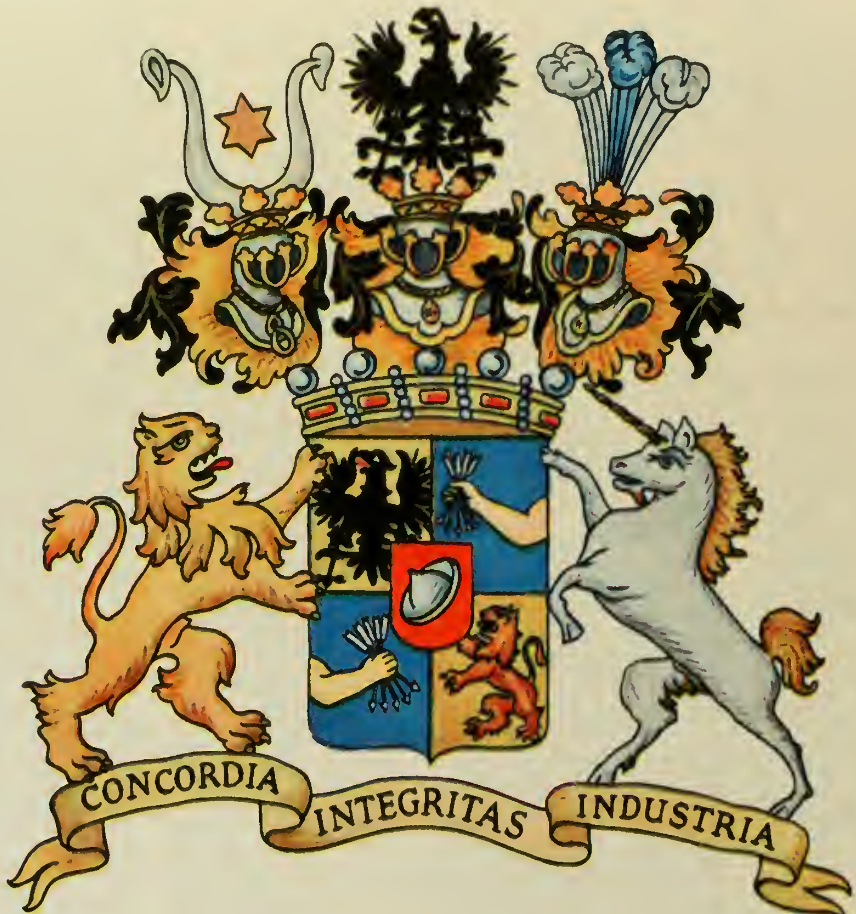
On the whole, it appeared that imported materials approximated a value of $250,000,000, or about one half the value of automotive products actually exported from the U. S.

Presenting the Living Rothschilds

In curious gallery.

"I AM of the opinion, Madame, that there never can be too many Rothschilds," said Benjamin Disraeli to Queen Victoria. Today there are 37 persons who legitimately bear the name of Rothschild, ranging from 85-year-old Baron Edmond de Rothschild in Paris to the 3-year-old Baroness Gwendolina in Vienna. There are half a dozen more, Rothschild-born, who have changed their names on marriage, such as Mrs. Clive Behrens, and the Baroness Ephrussi, who always wears pink taffeta and runs a well-attended chemin de fer table in her Paris house; and there must be at least a score of Rothschild nephews and nieces like Sir Philip Sassoon, Baroness Bettina Springer and her brother Baron Albert.

The following pages constitute an annotated gallery of Living Rothschilds. They are rich and respectable, like the Dowager Lady Rothschild of London; or rich and spectacular, like "Jimmie" de Rothschild; or rich and notorious, like Baron Maurice de Rothschild; or rich and imbecile, like Baron Georg von Rothschild; or rich and brilliant, like Baron Henri de Rothschild. Time has loosened the family ties, so that while all the Living Rothschilds know of each other, no Rothschild possesses a photograph album as complete as the gallery which follows.



THE COAT OF ARMS

By way of introduction we need refer but briefly to the oft-told tale of Rothschild origin. Nearly everyone knows about Mayer Amschel, the Jewish moneylender of Frankfort, who took the name of Rothschild from the red shield hanging over his door and who amassed a fortune lending money to impoverished princes and selling rare coins to collectors. No less popular in fact and fiction are his five branch-banking sons:

Nathan	1777-1836	of London
James	1792-1868	of Paris
Solomon	1774-1855	of Vienna
Karl	1788-1855	of Naples
Amschel Jr.	1773-1855	of Frankfort

Throughout the first half of the 19th century they made an unparalleled series of bold and accurate guesses and one appalling oversight. The oversight was America.

In any country, at any time, the Rothschild brothers could have become rich, but it was their guess about Napoleon that set them on their unique pedestal. The five brothers were clever enough to realize that for all his genius, for all his victories, Napoleon could not last. On that intuition they staked every penny. Nathan's fabled advance news of the Battle of Waterloo gave the Rothschilds an opportunity to buy depressed securities in London. Even without that coup, the day after Waterloo was to find all the established governments of Europe deeply in their debt.

Dealing with each other, sending secret messengers weekly back and forth across a continent, taught the Rothschilds the value of rapid communication. So they, and especially Solomon of Austria, guessed right about railroads, became the railroad builders of Europe. While Calvinist clergymen thundered against the steam engine as an invention of the devil, and country squires grumbled that the filthy tea kettles on wheels were running the countryside, the Rothschilds and their sons were digging into their coffers and pouring out gold to lay tracks. And the gold that they spent came back a hundred-fold.

On only one important point did the Rothschilds guess wrong. They never would have anything to do with the United States of America. Imagination falters at what the Rothschilds might be today if they had spent on the infant industries of this country half the sums they poured into Imperial Austria.

But the 37 Rothschilds and their kin are content. None is poverty-stricken. None has ever required an American wife to support him. Nobody sneers at them because they are Jews; nobody makes fun of the intricate Austrian coat-of-arms blazoned on this page which all the Rothschilds adopted after a bargain with Metternich. The results are several. Rothschilds still bring up their children according to the Talmud but the necessity for concentration no longer forces them to marry their own cousins or uncles. French Rothschilds still visit English Rothschilds, Austrian Rothschilds are frequently with both, but the solemn and stately annual family pilgrimages have disappeared. A hundred years ago Mayer Amschel used to walk down the Frankfort gutters, for fear his coat would brush against a Gentile; today one of Baron Robert de Rothschild's best friends is the devoutly Catholic Duc de Guiche, and the gentle, twittering Lady Battersea (Constance de Rothschild) is reputed to know more curates than anyone in England. Greatest change, the Rothschilds have become nationalized, in contrast with their ancestors who, in an age of fanatical anti-Semitism, felt no allegiance except to each other. Now there are various medals for valor on various Rothschild chests. Evelyn Achille de Rothschild died in battle as a British officer and lies buried in the Holy Land. Yet certain customs remain in common—every proper Rothschild girl receives on birth six pearls each worth £100 and six pearls on every birthday.

In finance, Rothschilds have become indifferent but never stupid. (Another dictum: "There was never a stupid Rothschild.") Branches of the original Rothschild bank remain in London, Paris, Vienna. Only a year ago financial disaster threatened the second largest bank in Austria. At the crucial moment, Baron Louis Rothschild, president of the largest bank, the Credit-Anstalt für Handel und Gewerbe, raced back to town from his deer forest, still in hunting clothes, and put through a last minute merger. Society, thereafter, dubbed him "Emperor of Austria"; Viennese newspapers, more discreet, hailed him as "the saviour of Austria"; better informed Austrians believed that Baron Louis had engineered the entire crisis and pulled off another typical Rothschild coup. But the Rothschild position in broken Austria is not characteristic. In finance, the Rothschilds are important customers rather than forceful operators. Shrewdly, but without too much effort, they manage their capital which is probably not as great as that of a dozen individual Americans. Control of the English bank was given to the sons of Dowager Lady Leopold de Rothschild over the head of the present Lord Rothschild, who was deemed financially incapable. But probably never again will the principal heirs be selected on the basis of comparative merit. The old control is gone. Society may rejoice in the increase of a tribe so consistently intelligent and colorful; but, so far as the fortune is concerned, there are, at last, too many Rothschilds.

BURLIN
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England's Tribe of Nathan

DOWAGER LADY ROTHSCHILD. Here, as she was 25 years ago, is one of the few photographs of Emma Louisa, matriarch of the Tribe of Nathan, now old, deaf, crabbed and cross, the mother of the present Lord. She is a Rothschild herself, daughter of Charles of the short-lived Naples branch. Ages ago she came to London, married her first cousin, and saw him become, through the good offices of the pious William Ewart Gladstone, the first orthodox Jewish Peer in Great Britain. (The elegant Disraeli was a baptized member of the Church of England.) All through the Victorian era she was one of London's most brilliant, most lavish hostesses, a leader in Jewish and Christian charities. She is still able to open the ancestral home in Piccadilly on occasions, and preside, leaning on an ebony cane, at brilliant parties for her débutante granddaughters. Her greatest pleasure is a visit from her spryer 82 year old sister, the dowager of the French branch (see page 102).

Lafayette Ltd.

CONSTANCE, LADY BATTERSEA. To this bubbling, motherly, twittering friend of Disraeli, of Asquith, of bishops and countless curates we are indebted for *Reminiscences*, which contain invaluable genealogical tables. But her earliest work is a *History and Literature of the Israelites* published in 1869 for use in her free Jewish schools before she married that beautiful man and Christian, Cyril Flower, 1st Baron Battersea. She is now 87, second cousin of the flea-collector, good angel to both Jew and Gentile.

THE HONORABLE NATHANIEL VICTOR ROTHSCHILD. Here, operative at one of the most sacred fixtures of the London social season, the Eton-Harrow cricket match, is the heir to the Rothschild title, Nathaniel Victor, nephew of that great flea-collector, Lionel Walter, Baron Rothschild. The Hon. Nathaniel, batting for Harrow, is the son of the late Charles Rothschild who committed suicide from boredom, and in fear of approaching insanity. This present Rothschild heir once killed a man in a motor accident—a serious matter in England—but was immediately acquitted of manslaughter.

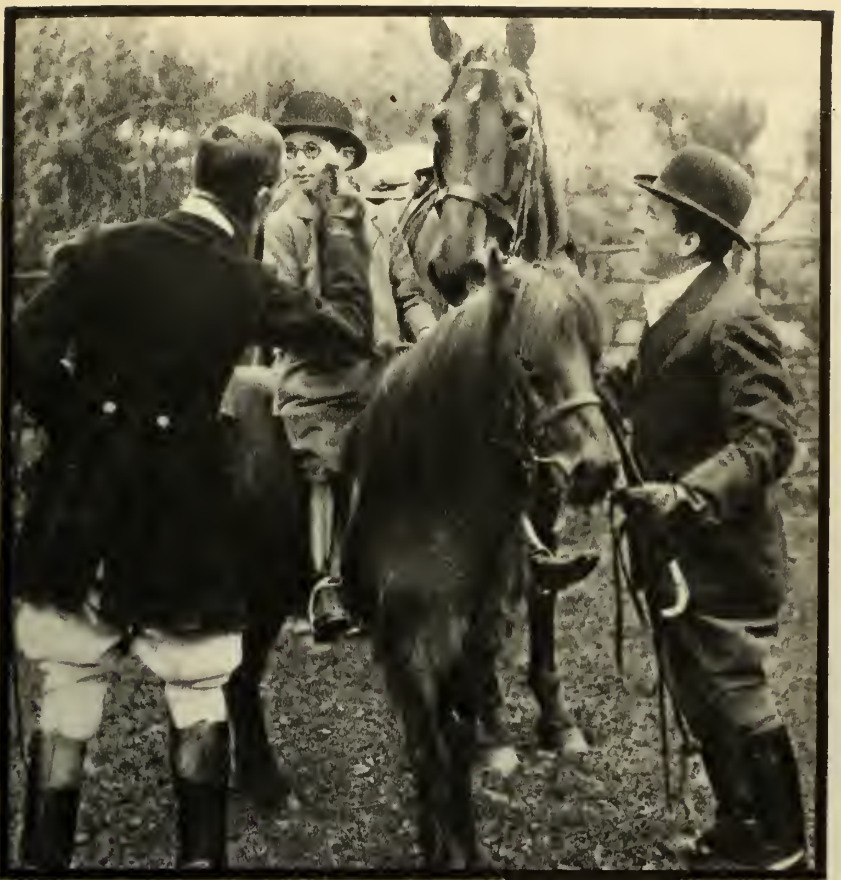
Sport & General

P. & A.

LIONEL WALTER, BARON ROTHSCHILD Lord Rothschild, titular and bachelor head of the British family, has little but his title to console him. Great-grandson of the founder of the British branch, he is probably the poorest of the elder Rothschilds although he could recently afford £350 for a Great Auk's egg. As a young man he was actually dismissed from the firm with £40,000 after a flood of blackmail letters and suspicious milliners' bills had swept into "New Court", the Rothschild bank. The Speaker of the House of Commons once requested Lionel Walter's father to forbid his son's inviting his mistresses to the Ladies' Gallery—improper society for the wives of honest M. P.'s. All that is passed. Lord Rothschild is now an eminent naturalist, and the most famous living authority on fleas. At Tring Park, the family seat, there are butterflies and birds, kangaroos and ring-tailed emus, and "Komodo Dragons",—giant lizards that race 30 miles an hour up and down their wired runways.

Keystone

NICA, MIRIAM AND LIBERTY ROTHSCHILD. Here is one of the most attractive Rothschild pictures in existence. It shows the three sisters of the present heir to the Rothschild title as they were a number of years ago, playing on the lawn of their father's country place. Today Miriam, in the center, is a strapping horsewoman; Liberty, on the right, is a talented musician with a studio of her own in one wing of her father's Palace Green town house, and little Nica is a justly popular sub-débutante.

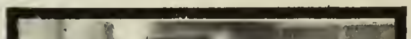


L. N. A.

EDMOND LEOPOLD DE ROTHSCHILD, being smeared according to an ancient Gentile tradition with the blood of an unclean beast, is the 14 year old heir to the Rothschild fortune. (He is respectively son and nephew of the financiers shown immediately below.) In November Edmond made his début in the hunting field, was lucky enough to be up with his shaggy Shetland pony at a kill, and was solemnly "blooded" with the stump of the dead fox's brush. A few months earlier he made still another début when he stood at his confirmation in an Eton jacket, a high silk hat and a prayer shawl, beneath an intricate stained glass window dedicated to his great-great-grandfather (the English Founder), and glibly read in Hebrew his Chapters of the Law, while a bearded rabbi pronounced him Bar Mitzvah—a Son of the Commandment.

Acme

LIONEL NATHAN



© Sport & General

AND HIS BROTHER, TONY

© Sport & General

DOWAGER LADY LEOPOLD DE ROTHSCHILD. No Rothschild is a better horsewoman than the Dowager Lady Leopold, née Marie Perugia of Trieste, aunt by marriage of the present Lord. When Leopold, her husband, was a small and scowling baby the romantic Mrs. Disraeli said to his mother: "My dear, that beautiful baby may be the future Messiah whom we are led to expect. Who knows? And you will be the most fortunate of women." Dowager Lady Leopold became not only the wife of the Little Messiah but the mother of the two present partners in the firm of N. M. Rothschild & Sons.

P. & A.

TONY'S WIFE

© Marcus Adams

TONY'S CHILD

Gaudy though their trappings may be, we have on the left the only two partners of the house that paid for Suez—N. M. Rothschild & Sons. Lionel Nathan, age 48, attending a court levee in his uniform as major in the Honorable Artillery Co., horse battalion, is the senior. A little pompous, this Nathan was an M. P. from 1910 to 1923, representing Aylesbury which has sent up a Rothschild ever since 1865. At his country estate at Exbury he breeds show orchids and raises intricately hybrid rhododendrons. His children are brought up according to the Talmud, but he is nevertheless fond of bacon for breakfast.

Spectacled smiling Anthony de Rothschild in pink, is shown here at a meet of the Rothschilds' favorite pack, the Whaddon Chase. Tony is the most exemplary of all Rothschilds. He works hard, goes to bed early, reads instructive books. At Harrow he was Senior Prefect. He took honors in history at Cambridge, and would have been a history don but for his sense of responsibility to the family bank—a responsibility which his grandfather forced upon him when the present Lord Rothschild took, irredeemably, to ladies and fleas. He exercises regularly and plays an excellent game of squash. True, like other Rothschilds he supports a racing stable, but only to improve the quality of British horseflesh.

When, in 1925, Tony married Yvonne Cahen D'Anvers (offspring of the Belgian bankers who have had business and social relations with the Rothschilds for generations), half the banking houses of Europe were represented at the wedding. Although she has failed to produce a man-child (Renée is only child) she has achieved social éclat as those who attended the Romance of History ball can testify. There she wiggled as a most seductive Cleopatra without reflecting the slightest discredit on the Rothschild name.

The Tribe of James of Paris

BARON EDMOND DE ROTHSCHILD. The Absolutely Original Mayer Amschel of Frankfort, who begat The Five Brothers, died in 1812. In 1824, more than 100 years ago, his son James, the astute, red-headed founder of the French branch went to Frankfort and married his own niece. The fruit of this curious union (which according to the Council of Trent, 1568, is not incestuous in the case of ruling Princes) was four sons and a daughter. On the left, is the only living son of James and Niece, and the only living grandchild of the Absolutely Original Mayer Amschel.

The gentle courtly Baron Edmond recently gave 30 million francs to biology and chemistry, and other millions to Zionism. Still to the world at large he is chiefly known as the father of the two spectacular brothers, James and Maurice (see below), who, incredible as it may seem, are of the same generation as the old lady on the right.

U. & U.

THÉRÈSE, DOWAGER BARONESS JAMES DE ROTHSCHILD, 82, younger sister of the crabbed old matriarch of England's Tribe of Nathan, whom she goes to visit twice a year.

Autocratic, indefatigable, she indulges her passion for activity in countless charities. During the mornings her salons are so full of petty petitioners that early callers are relegated to the vestibule. In the afternoon her higher class beggars (ruined aristocrats and the like) occupy her until four; then in her carriage with its armchair she makes her rounds of visits, distributing chocolates here, a jeune fille's dowry there, a chicken elsewhere.

She bore the most talented living Rothschild—Baron Henri.

In 1881, two dozen Rothschilds escorted to Père Lachaise the body of that Baron James de Rothschild who was the husband of the autocratic old lady in the upper right. With the cane strode the First Lord Rothschild.

Daily Express

BARON JAMES DE ROTHSCHILD, at left. Our Jimmie, to the English sporting public, is a member of Parliament from the Isle of Ely, and the most flamboyant of all the Rothschilds in England. The "Isle of Ely" is no island, but that sudden hump of land high over the plains of Cambridgeshire on which stands the cathedral city of Ely. Likewise Baron Jimmie is not really a British Rothschild at all. He was born in Paris in 1878, eldest son of Baron Edmond (above), and is a naturalized British subject.

Wherever horses are running and ladies are lovely, there one may find the saturnine Jimmie with his gray top hat, his spats, his sponge-bag trousers, his unforgettable face, and his monocle—a legitimate monocle, for Baron Jimmie is blind in one eye. Though he fought with distinction in the war (with the Jewish Legion in Palestine and as Major of Royal Fusiliers), his blind eye was caused by a golf ball, not a bullet.

Always lucky, he won £75,000 one racing day and inherited Waddenson Hall from his English aunt who, three days before she died, decided she preferred the gallant French Jimmie to the industrious English Tony.

MAURICE ("MOMO") DE ROTHSCHILD, in bathrobe. Jimmie is an M. P., Momo, his brother, is a Senator of France. Jimmie's taste in trousers has lost him many Conservative votes; Momo, not to be outdone, went to his cousin Tony's wedding in a pair of mustard yellow trousers and a blue tail coat with brass buttons, and Maurice's beach robes are one of the sights of Deauville. Nor did Our Jimmie outdo him in the matter of aunts, for Maurice ingratiated himself with Baroness Adolphe Rothschild (ugly blue-stocking in a blond wig who reeked of fat cigars) and from her got a big estate near Geneva. On it is an aquarium of blue trout which are fed daily with the heart of one bull.

In Maurice's spectacular career he has been the owner of Sardanapale, a Grand Prix winner, he has fought a duel over a horse and refused to fight another duel with Cartier, the jeweler, whom he had insulted. For bribery in elections, to wit, buying new uniforms for the local fire department, new cows for the peasants and drinks for all on election day, he has long been notorious, but only once did French Parliament go so far as to unseat him. He was divorced from a famous beauty but his gallantries are now said to be innocent. However, with the talented English painter Augustus John he was cited as a corespondent, and last year he was sued for accidentally peppering a fellow grouse shooter with bird shot. His Paris home has a ceiling by Romain, endless paintings and everything that the notorious Benvenuto Cellini made for François Premier.

International

© Sport & General

BARON ROBERT DE ROTHSCHILD, shown leading in one of his triumphant race-horses, is the only French Rothschild to play polo. At Chantilly he owns a magnificent château with fabulous decorations by a modern Russian artist. There he supports a private race course and polo field and plays a full schedule through the season, under the pseudonym of M. Errer (his initials are R. R.). Scientific visitors to Chantilly are more interested in his vegetable garden where he raises unbelievable piebald gourds for table decorations. In the Rothschild tradition, he is the proprietor of what is often considered the finest red wine in the world, Château Lafitte, much admired by his nephew, Sir Philip Sassoon. Recently he has taken over from Baron Edouard (on left) most of the responsibility for Rothschild financial affairs, including railroads in France and Spain. Baron Robert, despite his youthful appearance, has three grown children,—James, Diane, Cecile.

BARON EDOUARD DE ROTHSCHILD, above, with wife (Germaine Halphen) and daughter (Jacqueline). In the finest Rothschild railroad tradition, he is President of the *Chemin de Fer du Nord* which connects Paris with north-eastern France and thence Germany. As the eldest son of the eldest son of French Founder James, he is head of the Rothschild bank in France and as such a Regent of the *Banque de France*. With a Paris palace once owned by Talleyrand, with châteaux at Chantilly, Ferrieres and Cannes, he is socially the most distinguished. His wife dresses the part, but when asked who painted some picture on her walls will reply: "Je ne me rappelle plus si c'est un Raphael: je le demanderai à Edouard." Thus, at the moment, there are four Paris Rothschilds especially to be remembered—old Baron Edmond; his son, Baron Maurice, the notorious Senator; his nephew, this Baron, the financial head; and Baron Henri, the most justly celebrated (see below).

L. M. A.

U. & U.

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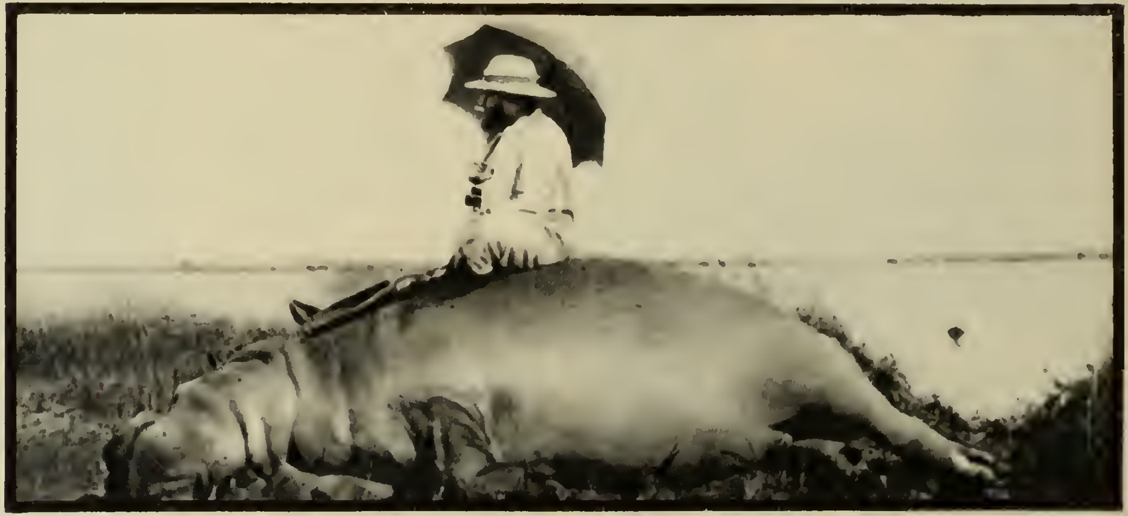


BARON HENRI DE ROTHSCHILD (above *and* to the left) is the most elegant of the French Rothschilds. He was for years a practising physician, a cancer research worker. The big milkmen cursed him when he founded Paris's first free milk stations. He and his mother (see opp. page) founded the Hôpital Rothschild in Paris and another hospital in Tangier. And his wife (Mathilde Weisweiller) was France's "Florence Nightingale of the Great War". Under two pseudonyms, André Pascal and Charles des Fontaines, he is an essayist and playwright of note—his most famous plays being *Caducé*, an exposé of fashionable doctors and *Crœsus*, a satire on a rich man's philosophy. Like other wine lords he loses money on his great Bordeaux vineyard of Château Mouton-Rothschild (on all of whose bottles his name appears in full), but he manufactures at a profit the perfume *Isabey*—named after the 19th century miniature painter. Because thundering busses disturbed him in bed and the pastels on his wall and the wine in his cellar, he sold his ancient home to the Union Interalliée, where American expatriates now tea.

Baron Henri de Rothschild's real fame is as a patron of arts. Himself versatile, intelligent and explosive, he is, without question, the Lorenzo de Medici, the Otto Kahn of modern Paris. He has endowed a home for infirm playwrights at Suresnes, he has backed poets, painters, art galleries, schools. Only a few months ago he made his most magnificent gesture by presenting his delicate, dilettante son Philippe with a two-million-dollar theatre to play with, the Théatre Pigalle, a gorgeous affair of scarlet leather, nickel railings, mahogany-colored tin and intercepting arcs of light. It contains a ballroom, a dining room for first nighters, a bar, a quadruple rising and falling stage, and the most perfect mechanical equipment in Europe.

Baron Henri has done and does everything. He yachts on *Eros*. He shoots rhinoceroses in mid-velt and sits on them under an umbrella (above). We also print two pictures (on the left) showing him with and without the beard he wore so long in the manner of an apache.

Besides the dilettante, Philippe, he raised a son who flew bravely in the war and married a distant French relative of the U. S. du Ponts after he had written four pounds of love-letters to a girl who sued. Space is lacking for pictures of his sons but on the left is that most charming hostess, his daughter Nadine Charlotte (Mme Adrien Thierry). She sketches, sculpts, wears the finest string of Rothschild pearls, and raises three beautiful great-grandchildren for Thérèse, the Dowager Baroness.

GUY DE ROTHSCHILD, on right, son of Baron Edouard, is chief heir to the Rothschild business in France—as his cousin Edmond is heir in England. Like all younger Rothschilds he speaks English perfectly. He is here shown playing golf at North Berwick, Scotland.

© Sport & General

BURLIN
PUBL
LIB

Austria's Tribe of Solomon

Wide World

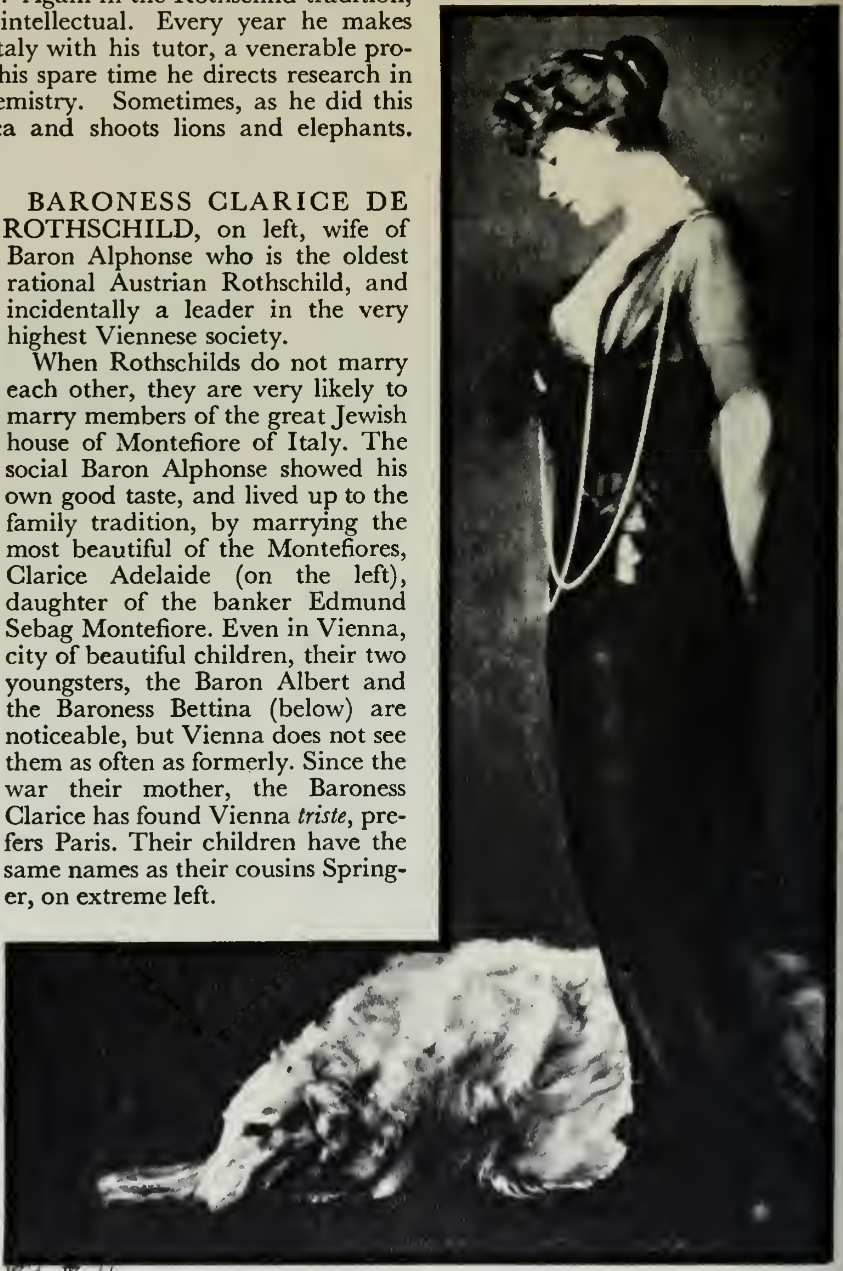
BARON LOUIS ROTHSCHILD. It was in London and Frankfort that the Rothschild power first was felt, but it was from the grateful Hapsburgs that the family received its first honors, its coat of arms, and its first title. It is still in Vienna that Rothschilds are relatively most important.

And Rothschild genealogy is simpler in Vienna than elsewhere. All the living adult Austrian Rothschilds are children of one father, Albert Solomon de Rothschild, grandson of the founder of their house, Solomon, who was Prince Metternich's able collaborator. There were six, one daughter, five sons. Of these, Georg, the eldest, is hopelessly insane and lives in a luxurious private house on the grounds of the state asylum at Mauerohling from which he is allowed to visit his Viennese relations at lucid intervals. The youngest, Oscar, committed suicide in the shadow of the famous *Lusthaus* restaurant in the *Prater*, when old Solomon wearied of his son's amorous eccentricities and forbade him to marry Olga Menn, granddaughter of a Chicago boarding-house keeper. Another brother is devoted to society, another is a naturalized Czechoslovak, which leaves only Louis, shown on left, to carry on the business of S. M. von Rothschild.

He is quite capable of it. Besides managing the family firm, he is President of Oesterrichische-Credit-Anstalt Für Handel und Gewerbe, the largest bank in Austria, which resulted last October from the greatest Rothschild coup in recent history (as related in the introduction to this gallery).

A bachelor, Baron Louis plays polo, like his French cousin Robert, maintains a baroque Viennese palace and a beautiful private park in the suburbs which was open to the public until increased taxation by Vienna's Socialist Government caused him to close it a few months ago. Again in the Rothschild tradition, Baron Louis is heavily intellectual. Every year he makes a solemn pilgrimage to Italy with his tutor, a venerable professor of archeology. In his spare time he directs research in geology, biology and chemistry. Sometimes, as he did this winter, he flies to Africa and shoots lions and elephants.

Wide World


Wide World

BARONESS CLARICE DE ROTHSCHILD, on left, wife of Baron Alphonse who is the oldest rational Austrian Rothschild, and incidentally a leader in the very highest Viennese society.

When Rothschilds do not marry each other, they are very likely to marry members of the great Jewish house of Montefiore of Italy. The social Baron Alphonse showed his own good taste, and lived up to the family tradition, by marrying the most beautiful of the Montefiores, Clarice Adelaide (on the left), daughter of the banker Edmund Sebag Montefiore. Even in Vienna, city of beautiful children, their two youngsters, the Baron Albert and the Baroness Bettina (below) are noticeable, but Vienna does not see them as often as formerly. Since the war their mother, the Baroness Clarice has found Vienna *triste*, prefers Paris. Their children have the same names as their cousins Springer, on extreme left.

VALENTINE, BARONESS SPRINGER, above, only sister of Baron Louis. Despite appearances, she is not pinching her small daughter, Bettina, in the ribs, but twitching an invisible thread to take this picture, for the Baroness Springer is an enthusiastic amateur photographer and this portrait was not only taken, but developed, retouched and printed in her own studio. She is stone deaf, and cares little for society. Living quietly in a small house on the Metternich Strasse, she reads voraciously, collects paintings of every castle in Austria, and armed with one of her cinema cameras, emerges occasionally for hunting trips in North Africa.

Atelier Edith Barakovich

BARONESS EUGENE ROTHSCHILD. The shrewd, professional and republican founders of Czechoslovakia did everything that they could to make their country powerful, then for good measure decided that since other European countries had Rothschilds they should have a Rothschild too. Baron Eugene, heavily interested in Czechoslovakian salt mines, offered himself for naturalization as a Czech, and took with him his bride, née Kitty Wolff of Philadelphia, onetime wife of Count Schoenborn of Vienna. They "reside" in Prague, but are usually discovered in Paris.

A TOAST TO YOU FORTUNE

Not just because you're a handsome magazine, admirably illustrated and printed—and engagingly written—but better than that, because you point what happens to be the greatest of all lessons in advertising.

You have taken what are sometimes called "prosaic business" and "sordid industry"—you have viewed them with imagination, insight, and a sense of beauty—and behold, we thrill at the pages you lay before us. No longer is business a column of figures, or work a daily grind. Here is epic enterprise, a panorama of romance, adventure, conquest—with beauty in factories and derricks.

What you, Fortune, are doing for business, advertising should do for the products of business. Planned with insight, executed with inspiration, advertising can make dull, prosaic products as alive and thrilling as you have made the spectacle of business.

There is a little advertising that does this—and much that does not.

You may have sprung from a survey, Fortune, which showed that the world needed a "luxurious" magazine of business. But it wasn't this survey, and it isn't your luxury, that makes you what you are.

It's the transforming touch you've brought to dry facts that has won you public welcome. A toast to you! You're a happy example of the publisher's art—and a pertinent point to a moral.

Young & Rubicam, Incorporated, Advertising, New York, Philadelphia.

Serving the following clients: The Black Flag Company, The Borden Company, Edward G. Budd Manufacturing Co. and Budd Wheel Company, Columbia Phonograph Company, Inc., Devoe & Raynolds Co., Inc., Fels & Co., General Foods Corporation, International Silver Company, Johnson and Johnson, The Norwich Pharmacal Company, Pennsylvania Grade Crude Oil Association, Quaker State Oil Refining Co., Reo Motor Car Company, Rolls-Royce of America, Inc., A. G. Spalding & Bros.

YOUNG & RUBICAM
INC.

Transactions

Pullman Moves To Absorb Two Car Companies

Who. Pullman Incorporated, virtual monopolist of travelling beds. In its Pullmans (nearly 10,000) sit and slumber more than 30,000,000 passengers per annum. Founder George Mortimer Pullman died in 1897. The present directorate includes George F. Baker and a contingent from J. P. Morgan & Co. . .

What. Arranged to absorb Standard Steel Car Co. and Standard's affiliate, Osgood Bradley Car Co. In addition to railroad cars (passenger and freight) and a general line of iron and steel products, Standard Steel at one time made an automobile, the *Standard Eight*, long discontinued. To the Pittsburgh Railways Co. (street cars) Osgood Bradley last year delivered an aluminum street car. The Morgan interest in Pullman is balanced by the Mellon interest in Standard. Merger plans provided that Richard K. Mellon should become Director of Pullman Incorporated and that J. F. Drake, President of Standard Steel, should become Chairman of Pullman Incorporated . . .

Why. In addition to its carrier service, Pullman Incorporated, through a manufacturing subsidiary, also makes and sells railroad passenger and freight cars. The Standard merger will strengthen its position in this field, will diversify its products and will bring to one corporate unit an alliance of Morgan and Mellon financial strength.

United Fruit Buys Cuyamel Fruit Co.

Who. The United Fruit Co., largest Central American landowner (2,000,000 acres in Colombia, Costa Rica, Guatemala, Honduras, Panama, Canary Islands, Jamaica, Nicaragua, England, France and the United States), largest fruit shipper (97 steamships in "The Great White Fleet"), largest United States banana importer (more than thirty million stems annually with about a hundred and thirty bananas on each stem) . . .

What. Approved an exchange of U. F. C. shares for the assets of the Cuyamel Fruit Co., second largest, with big banana plantations in Honduras, home office in New Orleans . . .

Why. Because aggressive U. F. C. selling methods have caused a demand greater than their supply, while Cuyamel plantation improvements have caused a supply greater than demand.

$25,000,000 MERGER OF TIN SMELTING COS. FORMING IN LONDON

Who. The Patino (Bolivian) tin interests, the Anglo-Oriental (Straits Settlements) group, and members of the new Tin Producers' Association . . .

What. Formed a holding company to take over four great British smelting companies, whose president will be Simon I. Patino, whose directors will include Sir Philip Cunliffe-Lister and John H. C. E. Howeson . . .

Why. To represent about half of the world's tin supply and, by bringing producers and smelters into closer contact, to make stabilization of the industry easier.

Carbon Black Makers Form Export Group

Who. Representatives of companies producing more than 92% of the world's carbon black, including the United Carbon Co., the Godfrey L. Cabot companies, Columbian Carbon, Electric Bond & Share . . .

What. Formed the Carbon Black Export Association, Inc. Carbon black is a pigment made by playing a natural gas flame against metal. While its largest (volume) service is to strengthen rubber used in tires, its largest (importance) service lies in making new inks. A single pound mixed with oil will print 20,000 newspaper pages. The chief region of production is Texas where the oil industry cannot market all the natural gas it produces . . .

Why. To promote carbon black sales abroad. Exports of carbon black for 1929 are estimated at 100,000,000 pounds, valued at about 10¢ a pound. Such combinations, permitted for *foreign* marketing, would be held violations of anti-trust laws if formed for *domestic* marketing.

15-DAY PERIOD NETS GARDEN $501,000

Who. Madison Square Garden Corp., Manhattan entertainment enterprise specializing in prize fight promotion. Directorate includes Kermit Roosevelt, Richard F. Hoyt, Walter P. Chrysler, Matthew Chauncey Brush and John Ringling. Death of President George L. (Tex) Rickard and retirement of Chief Attraction William Harrison Dempsey have adversely affected earnings . . .

What. Rejoiced in record gate receipts from December 1-15, as follows:

Dec. 1-7 Six Day Bicycle Race	$220,000
Dec. 8 Hockey, Rangers v. Pittsburgh . . .	24,000
Dec. 9 Boxing, Von Porat v. Scott . .	92,000
Dec. 10 Hockey, Americans v. Toronto . . .	11,000
Dec. 12 Hockey, Rangers v. Canadiens .	20,000
Dec. 13 Boxing, Goldstein v. McLarnin .	107,000
Dec. 15 Hockey, Americans v. Boston . .	27,000
Total (record for fortnight)	$501,000

Cuckoo Clock Makers Merge To Push German Product

Who. German manufacturers of Black Forest cuckoo clocks . . .

What. Have entered into a cuckoo clock cartel with price-fixing, a standard trade-mark and an advertising campaign . . .

Why. To improve conditions in the cuckoo clock industry.

MUSIC PUBLISHERS JOIN RADIO CHAIN

Who. Radio Corp. of America, under whose patents 90% of American radios are made and whose interests include, in addition to radio, wireless communication, talking cinema production and mechanism, vaudeville and cinema theatres and phonographs; headed by Owen D. Young, managed by David Sarnoff . . .

What. Announced the formation of Radio Music Corp., incorporators being National Broadcasting Co. (50% owned by Radio Corp.), Carl Fischer, and Leo Feist, Inc., leading publishers, respectively, of classical and semi-classical and of popular (jazz) music . . .

Why. To control raw material (i.e. songs and song writers) for use in broadcasting and in cinema theme songs. Official purpose announced as education of public taste to an appreciation of better-than-jazz music.

BIG BOSTON BANK MERGER CONSUMMATED

Who. The First National Bank of Boston and the Old Colony Trust Co. Old Colony was founded by Jefferson Coolidge in 1890, is identified through its directors with such companies as General Electric, Amoskeag Manufacturing, Pepperell Manufacturing, New England Mutual Life. While Old Colony has conservatively confined its interests to New England, First National has aggressively spread the sphere of its First National Corp. as far west as St. Louis. Companies identified with First National include United Fruit, American Woolen, United Shoe . . .

What. Exchanged stock, First National becoming trustee for Old Colony stock. Old Colony continues its trust business, but is now owned by First National Shareholders.

13-Month Calendar Adopted for 1930 by Sears-Roebuck

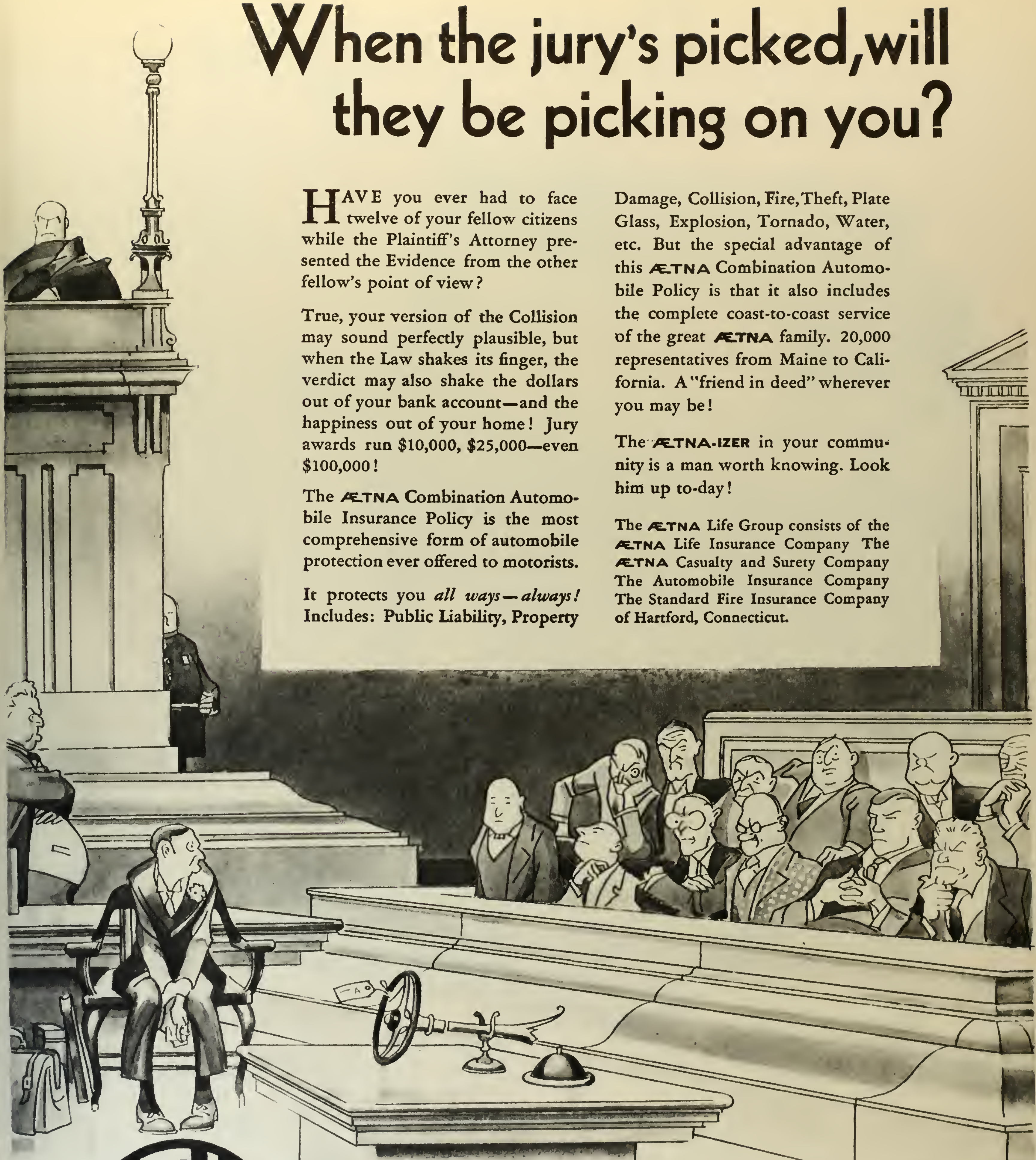
Who. Sears, Roebuck & Co., Chicago mail order house which annually distributes $440,000,000 in merchandise to 12,000,000 purchasers and sends out catalogs, describing some 40,000 different articles . . .

What. Decided to begin the year 1930 on the year's first Thursday, then to divide the year into 13 months of 28 days each. The arrangement is purely internal, will not affect customers, will concern chiefly Sears, Roebuck bookkeeping and paydays . . .

Why. To give the new calendar a year's trial to "determine its value in the business world." Several hundred other American firms have also adopted the 13-month calendar, of which George Eastman (Eastman Kodak) is the leading exponent.

[*Continued on page 112*]

When the jury's picked, will they be picking on you?



HAVE you ever had to face twelve of your fellow citizens while the Plaintiff's Attorney presented the Evidence from the other fellow's point of view?

True, your version of the Collision may sound perfectly plausible, but when the Law shakes its finger, the verdict may also shake the dollars out of your bank account—and the happiness out of your home! Jury awards run $10,000, $25,000—even $100,000!

The ÆTNA Combination Automobile Insurance Policy is the most comprehensive form of automobile protection ever offered to motorists.

It protects you *all ways—always!* Includes: Public Liability, Property Damage, Collision, Fire, Theft, Plate Glass, Explosion, Tornado, Water, etc. But the special advantage of this ÆTNA Combination Automobile Policy is that it also includes the complete coast-to-coast service of the great ÆTNA family. 20,000 representatives from Maine to California. A "friend in deed" wherever you may be!

The ÆTNA-IZER in your community is a man worth knowing. Look him up to-day!

The ÆTNA Life Group consists of the ÆTNA Life Insurance Company The ÆTNA Casualty and Surety Company The Automobile Insurance Company The Standard Fire Insurance Company of Hartford, Connecticut.

ÆTNA-IZE

SEE THE ÆTNA-IZER IN YOUR COMMUNITY — HE IS A MAN WORTH KNOWING

Burroughs

Burroughs
Hayes and Richmiller Inc.

TYPEWRITER BILLING MACHINE

Writes and computes the complete invoice as one operation—including all typing, extending, discounting, totaling. The only billing machine that performs direct multiplication. Burroughs Adding Machine Company, Detroit

Markets

Post-panic Speculation

(FORTUNE *asked Mr. Franz Schneider, Jr., financial editor of the New York* Sun *and author of several important articles on the money and credit situation, to write a critique of speculation in the light of the market break.*)

SUFFICIENT time has now elapsed since the stock market panic to put that event and its antecedents in perspective and to permit us to see the principal factors involved in their true proportions. We now see, for example, that the stock market did not break until after it had been definitely established that business had turned down. We see that things would have been much better if business had slackened after a spring peak instead of going on to an abnormal summer climax; and if the Federal Reserve Board had not vetoed the advance in discount rate that the Federal Reserve Bank in New York wished to make during spring and summer. We realize that the stock market liquidation was a natural consequence of the culmination of an upswing in business that was allowed to run too fast and too far, and that the inadequacy of the Stock Exchange ticker system helped to exaggerate the liquidation into a panic. We also understand that the extraordinary industrial activity and profits of the first half-year created a feeling of over-confidence that stimulated speculation and brought a reckless boom in investment trusts. We see that overissue of new stocks and bonds created a large volume of undigested securities. And sufficient time has passed for us to see that substantial progress has been made in liquidating the redundancies that accumulated and in preparing the way for a fresh period of prosperity.

Perhaps the present time of comparative quiet is a good one in which to clarify our thoughts on the subject of speculation. Properly engaged in, speculation performs a useful economic function and is ethically justifiable. Under other circumstances it becomes a destructive vice. The economic service performed by speculation is assumption of the risk-bearing function. Risks are as inevitable to business as passage of time. The future cannot be foretold with certainty and the manufacturer who is coverting raw materials or the business man who is merchandizing goods may find his compensation for service rendered wiped out by fluctuations in prices over which he has no control. The speculator, in economic theory, is a specialist in judging future values, and one who takes over and bears this risk for the producer, converter or distributor. The activity of speculators, according to economic theory, tends to smooth out fluctuations in values and to stabilize markets. It also helps to provide continuous markets in which others may buy and sell and also to establish prices that serve as guides to business men and as the basis for banking operations.

But, it will be objected, have we not just seen speculation overstimulating the rise of prices and so exaggerating instead of damping down the fluctuations? And in that event, what becomes of the theory as to the economic value of speculation? The answer is that speculation can be indulged in by the wrong kind of persons; and that when the wrong kind of persons attempt to speculate their activity degenerates into mere gambling.

Nearly twenty years ago Professor Emery of Yale prepared an excellent short essay on the ethics of speculation in which he divided speculators into three classes. He approved of the professional speculator of large means; and he also countenanced speculative activity by professional or business men with the important provisos that their speculations be moderate in proportion to their resources and that the speculations must not distract them from full performance of their primary duties. But in a third class he placed the great group of small "get rich quick" individuals who have neither the resource nor the character to assume the risk-bearing function. The activity of these individuals serves no economic purpose, and, because of the unwisdom of these operations, tends to exaggerate the fluctuations in prices. Properly speaking, these individuals are not speculators but gamblers. And their gambling inevitably injures the value of their normal services to the community.

Ethics of the Broker

The recent collapse undoubtedly has done a great deal to reduce the number of stock market gamblers, at least for the time being. But there remains a practical and ethical question for brokers to consider. The Stock Exchange has developed a tremendous market in securities by extending its ticker system all over the country and by listing a multitude of stocks for trading purposes. Speculation has been made very easy. And the transition to gambling also has been made very easy. Professor Emery pointed out that the conscientious broker should want to know whether his customer really can afford to trade, and on the scale attempted. No doubt there are many brokers who do exercise care in accepting accounts and who discourage overtrading. On the other hand, there certainly are other brokers whose only requirement for opening a margin account is that the customer be able to lay down a certain amount of cash; and who, having in mind "overhead" and the fact that earnings come from commissions, like to see "turnover" in customers' accounts, and who stimulate it with "tips". While the implications of this sort of thing are in the first instance ethical, they also have their very practical aspects, because to the extent that stock exchange activity degenerates into gambling by those not fitted to assume the risk-bearing function, to that extent will it invite interference and restriction by legislative authority.

Bonbright & Co., Inc.

(*In this department* FORTUNE *will print, at frequent intervals, brief descriptions of the country's chief investment houses and the companies whose securities they have underwritten.*)

What is Bonbright?

THE house of Bonbright & Company, Inc., 25 Nassau St., Manhattan, specializes in the securities of public utility operating, holding and management companies. Since public utility companies, rapidly expanding, have absorbed during the last six years more than a billion dollars a year of new capital, Bonbright & Co. has become powerful and prosperous. During the 1924-29 period, indeed, this company, either alone or with associates underwrote utility securities in the amount of $1,600,000,000, which was 15% of all the utility financing undertaken throughout the United States.

Nor has Bonbright been content merely to reap commissions from its services. The principal financing institution of the electric light and power industry, Bonbright has also become one of the industry's most effective and persuasive spokesmen. While the extraordinary integration of the utility systems focuses the attention of press, public and congress, Bonbright has undertaken to explain and interpret. To do this, it has gone to great effort and expense. The Bonbright survey of U. S. power and light companies is a standard utility text-book; together with the N. E. L. A., Bonbright has supplied the industry with its most exhaustive research on the intricacies of utility regulation. Armed with these visible signs of its enterprise and its enthusiasm, Bonbright has become not only the industry's banker, not only its spokesman, but to some extent its guide. Thus it is that some utility men consider Messrs. Thorne and Loomis, Bonbright's president and senior vice president, as the most potent forces in shaping the present and future organization of America's huge, complex power and light business.

Where is Bonbright?

It would be possible to answer this question, loosely: "At the right hand of Sidney Zollicoffer Mitchell". For it is true that from 1912 to the time of the Bonbright reorganization in 1920, Bonbright's most profitable activity was to market the securities of Electric Bond & Share, that vast holding company inspired by the General Electric Co. and now presided over by Mr. Mitchell. And it is also true that in the more recent financing of Electric Bond & Share and its many affiliates, Bonbright has found some of its most useful and important work. Specifically, the companies of the EBASCO group for which Bonbright has done its most representative financing, follow (American Gas and Electric Co., once closely affiliated with EBASCO, now practically independent of the group, is omitted from

[*Continued on page 112*]

(*Continued from page 109*)

this list of EBASCO companies:

Holding Companies
American Power and Light
(gross revenue, last 12 months)
$87,636,155
Operating Companies
Florida Power & Light Co.
Southwestern Power & Light Co.
Texas Power & Light Co.
Electric Power & Light
(gross revenue, last 12 months)
$57,385,076
New Orleans Public Service, Inc.
National Power & Light
(gross revenue, last 12 months)
$80,560,029
Carolina Power & Light Co.
Lehigh Power Securities Corp.

But in spite of this close and profitable association, it would be not only loose but incorrect to tie the house of Bonbright to the success of any one man, any one group. Bonbright is historically more indebted, but currently and actually no more linked to Mr. Mitchell and EBASCO than to Mr. Samuel Insull and his group. Of the Insull utilities group, Bonbright has helped finance these units:

Holding Company
Middle West Utilities Co.
(gross revenue, last 12 months)
$152,179,830
Operating Companies
Kansas Electric Power Co.
Penn Central Light & Power Co.

Or to that notable Cleveland financier and unifier of steel companies (see page 114), Mr. Cyrus S. Eaton:

Holding Company
United Light and Power
(gross revenue, last 12 months)
$94,635,311
Operating Companies
United Light and Railways
Columbia Railway Power & Light
Kansas City Power & Light

Or, though in somewhat less degree, to Mr. Thomas N. McCarter.

Holding Company
Public Service Corp. of New Jersey
(gross revenue, last 12 months)
$135,065,230
Operating Company
Public Service Electric and Gas Co.

And it would be possible to extend the list at length. Bonbright has played a very minor role in financing Cities Service Co. (Henry L. Doherty, president) and the Japanese systems (Tokyo Electric Light Co., Ltd.; Great Consolidated Electric Power Co., Ltd.); it has played a large part in America Gas and Power (Mr. Frank T. Hulswit's gas holding company). In 1927, for the newly-formed New York Power and Light (Niagara-Hudson River system) it brought out the largest single issue in the history of utility financing: $66,000,000 first mortgage 4½s. Bonbright has no dealings with Associated Gas & Electric Co., the company which operates through northeastern states, whose territory extends southwest through Kentucky, and which is headed by Mr. Howard C. Hopson.

Bonbright's enterprise last year linked three important holding companies into a new group, now known as Commonwealth & Southern Corporation. Last month, the link became a merger. For this group, which is more peculiarly Bonbright's own child than any of the other systems for which it acts as banker and researcher, the house has done much important work:

Holding Companies
(consolidated gross revenue of the parent company for the last 12 months was $151,404,677)
Commonwealth Power Corp.
Operating Companies
Consumers Power Co.
Tennessee Electric Power Co.
Penn-Ohio Edison Co.
Ohio River Edison Co.
Pennsylvania-Ohio Power & Light Co.
Pennsylvania Power Co.
Southeastern Power & Light Co.
Alabama Power Co.
Georgia Power Co.
Gulf Power Co.
South Carolina Power Co.

Commonwealth & Southern Corp., holding more than 95% of the common stocks of these companies, is itself an important item among the investments of American Superpower Corp., the last Bonbright interest this article will consider. When Bonbright formed American Superpower in 1923, it brought together the chiefs of the great systems. Out of this association was born (Jan. 1929) the United Corp. (projected by Messrs. Thorne and Loomis; identified with J. P. Morgan & Co.) and upon the model of the United Corp. was created (May 1929) Commonwealth & Southern Corporation. American Superpower, reporting to stock holders last December, announced that more than half its holdings were concentrated in United Corp. and Commonwealth & Southern.

Who is Bonbright?

Founders William P. and Irving W. Bonbright liquidated their interests in 1920. Important Bonbright personages of the present are: President Landon Ketchum Thorne (also President of American Superpower Corp.); Senior Vice President Alfred Lee Loomis; Vice President Horace S. Scarritt (in charge of marketing and distributing Bonbright issues); Vice President George Roberts (Bonbright's legal chief); Vice President Sidney A. Mitchell, able son of an able father, now an increasingly important factor in the councils of the Electric Bond & Share group; Vice President Pearson Winslow (expert on contracts, indentures and complicated negotiations generally). Of this active vigorous sextet, each one a Yale graduate, President Thorne and Vice President Loomis are perhaps

[*Continued on page 162*]

Transactions

TWO THEATRE MEN BALK IN SCALPER WAR

Who. Thirty-four New York theatre managers, controlling 58 of New York's 64 legitimate theatres in the Broadway district, approved an anti-ticket-speculator plan reached by Managers' Committeemen Arthur Hopkins, Brock Pemberton and Gilbert Miller. But A. L. Erlanger (5 theatres) and C. B. Dillingham (1 theatre) saw no merit in the Committee plan . . .

What. The plan provided that theatre managers, instead of selling to ticket brokers large blocks of seats far in advance, will make such sales on consignment only, retaining ownership of the tickets, specifying a markup of not more than 75¢ over the box office price, and taking back unsold seats. It also pledged managers to keep at the box office an ample ticket supply . . .

Why. With tickets peculators selling $4.40 tickets to a successful show for up to $13.20, managers felt that in turning over a large percentage of their ticket sales to a middleman, and in losing all control of the resale price, an economically unsound and ridiculous system of distribution had been developed.

THE HOTEL CECIL

◆

SALE TO SHELL-MEX, LIMITED

Who. Named for Cecil Rhodes, owned by the Duke of Westminster, fronting on the Strand and on Victoria Embankment (with a view of the Thames and Cleopatra's Needle), the Hotel Cecil was for many years a favored meeting-place for smartest London . . .

What. The Cecil was purchased by Shell-Mex., Ltd., subsidiary of Sir Henry Deterding's Royal Dutch-Shell petroleum company, and will be converted into an office building.

Why. Said the London *Times:* "Generally speaking, hotel policy favours the provision of wholly modern accommodation. The public taste in hotel matters has undergone a great change, and to adapt existing buildings of the older type to current requirements is almost prohibitive in cost, and structurally very difficult . . . The value of the Victoria Embankment frontage for first-rate offices has always been recognized and if the Hotel Cecil, which, with the Savoy Hotel, has occupied so much of the river front, is converted to such uses, very little of river frontage will remain for similar development."

STUTZ HEAD DENIES FIRM IS INSOLVENT

Who. Stutz Motor Car Company of America, Inc., builders of Stutz and Black Hawk automobiles. Stutz green bug racing cars were familiar as long ago as 1912. The company's most spectacular period came in 1920, when Allen A. Ryan, son of the late Thomas Fortune Ryan (the son's legacy from a $500,000,000 fortune was a pair of shirt studs) cornered Stutz, sending the stock to $724 a share. Stutz stock closed 1929 at about $1.50 a share . . .

What. A United States District Judge in an Indianapolis court dismissed a petition in involuntary bankruptcy filed against Stutz by three Indianapolis creditors . . .

Why. "I want to say," said Stutz President E. S. Gorrell, "that I am thoroughly disgusted with the way the Stutz Motor Car Company has been treated by citizens of the town [Indianapolis] to which it has always looked for its strongest support." Mr. Gorrell said that he was conferring with another automobile company concerning a merger when news of the bankruptcy suit spoiled the contemplated deal. He added that filing of the petition had cost the Stutz company $2,000,000 in public confidence.

[*Continued on page 114*]

A New Era In Industrial Building

FORTUNE Magazine inaugurates a new era in publishing. Austin inaugurates a new era in design and construction of industrial plants.

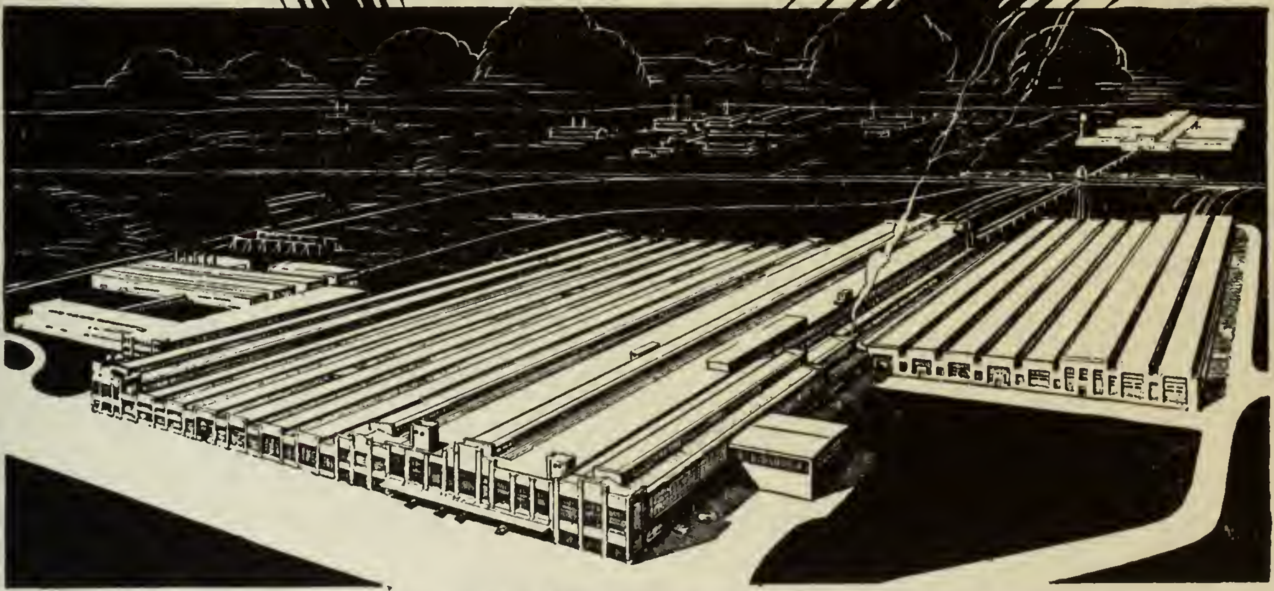
The Austin Method of Building is like straight line production in manufacturing. Embracing the complete project—design, construction and building equipment—it begins at one end and goes right through to the completed product, ready for delivery to the customer, in the shortest possible time.

It eliminates delays, backtracking, extra handling, waste, unnecessary labor or overhead of any kind. It is the application of the most advanced production methods to big, complicated building projects.

This nation-wide organization, with specialized engineering experience in many different industries, furnishes this exceptional service anywhere, guaranteeing in advance the total cost, completion date and high quality of materials and workmanship. Scores of the nation's industrial leaders have employed the Austin Method to their complete satisfaction.

Large companies contemplating new main plant projects, branch plants, warehouses, revamping or extension of present facilities, will find it worth while to get in touch with Austin. Phone the nearest office, wire or write.

THE AUSTIN METHOD



A large Mid-western manufacturing plant designed, built and equipped under the Austin Method of Undivided Responsibility.

THE AUSTIN COMPANY

Engineers and Builders · Cleveland

New York Chicago Philadelphia Newark Detroit Cincinnati Pittsburgh St. Louis Seattle
Portland Phoenix The Austin Company of California Ltd.: Los Angeles, Oakland and San Francisco
The Austin Company of Texas: Dallas The Austin Company of Canada, Limited

CHILDS TO FORM ANOTHER CHAIN

Who. William Childs ("Meats for the Meat Eater"; "Fruits, Cereals, Fresh Vegetables, Dairy Products for Health and Economy"); co-founder of the Childs restaurant chain ("The Nation's Host from Coast to Coast"); ousted from control in March, 1929 ("This is the child of my efforts. . . . You cannot tell what will happen when you take this child away") . . .

What. Planned a new restaurant chain, to begin with the old Archambault, Broadway and 102nd St., Manhattan. He could not, of course, use the Childs name, property of the Childs Corporation . . .

Why. Presumably to vindicate the soundness of his methods and policies.

U. S. STEEL MAY PURCHASE ATLAS

Who. The United States Steel Corporation . . .

What. Offered to buy the Atlas Portland Cement Co. Consideration: 180,000 shares of U. S. Steel common, currently valued at about $29,340,000. Atlas Portland Cement and Universal Portland Cement (the cement subsidiary of the Steel Company) are two of the country's four largest cement producers, together will make U. S. Steel largest producer with capacity of 36,500,000 barrels a year...

Why. To help stabilize cement industry (allied with steel in building), now disorganized through competition, price-cutting.

AUSTRALIAN PLANT FOR KAYSER & CO.

Who. Julius Kayser & Co., manufacturer and seller of full-fashioned silk hosiery; silk, woolen and fabric gloves; silk and cotton ribbed underwear . . .

What. Will build in Melbourne, Australia, a plant with an annual capacity of 100,000 dozen full-fashioned silk stockings . . .

Why. Because 60% of all imported-hose-clad Australian legs use Kayser brands; because the Commonwealth of Australia recently placed a tariff of $12.20 a dozen on imported hosiery; because by making its hosiery in Australia, Kayser & Co. will continue to supply its customers, and benefit from the protective tariff.

R. T. KANE TO MAKE TALKIES IN FRENCH

Who. Robert T. Kane, Hollywood producer and former production manager for Paramount . . .

What. Announced the formation of a Franco-American cinema company, with $10,000,000 backing, to make French talking pictures in Paris . . .

Why. Because American-made talking pictures, English-speaking, have a novelty value but are relatively unintelligible to French audiences, even with the generous addition of French explanatory titles.

U. P., AGAINST WILL, MUST BUILD LINE

Who. The Interstate Commerce Commission—11 governmental commissioners, appointed by the President, ratified by the Senate, charged with seeing that the railroads of the country conduct themselves in accordance with the public weal . . .

What. Ordered the Oregon-Washington Railroad & Navigation Company (a subsidiary of the Union Pacific railroad) to build, against its will, a 185-mile line between Crane, Oregon and Crescent Lake, Oregon, at an estimated cost of $9,000,000 . . .

Why. The order was requested by the Oregon Public Service Commission which maintained that the proposed line would open up a rich district in the foothills of the Cascade Mountains. Railroad men argued that such a line would be economically unsound. Significant issues: has the Interstate Commerce Commission the authority to compel a railroad to build, against its will, a line which it considers expensive and unprofitable? Almost immediately after this ruling came publication of the Commission's so-called Final Plan, dividing the country into 21 railroad systems.

HUGE STEEL MERGER IN THE MIDDLE WEST LINKS $350,000,000

Who. Cyrus Stephen Eaton, Canadian-born (Pugwash, Nova Scotia) naturalized citizen of the United States (1913); partner of Otis & Co., Cleveland financing house; ally of Cleveland's Mather and Hanna long-established iron and steel interests; organizer of utility and steel combinations; a 46-year-old multi-millionaire; the *Mellon of Ohio.* Arriving in Cleveland in 1907 (originally with aspirations toward the Baptist ministry), Mr. Eaton soon became interested in utilities—specifically, in Cleveland street railways. Later he went to Iowa, bought up options on utility companies, through one of these Iowa financings made his first connection with Otis & Co. In 1912 he organized Continental Gas & Electric, pioneer among utility holding companies. His fame in the steel business began in 1925 when he entered a meeting of harassed and money-seeking Trumbull Steel Co. directors, and laid before them a check for $20,000,000 . . .

What. Forged the Republic Steel Co., third largest steel company in the United States. Constituents: Republic Iron & Steel Co., well-integrated steel unit which last year acquired Trumbull Steel and Steel & Tubes, Inc., Central Alloy Steel Corp., leading producer of steel alloys and licensee of Krupp Works in the making of the newly developed stainless (nirosta) steel, Donner Steel Co., Bourne-Fuller Co., and Trumbull Cliffs Furnace Co. The new Republic company has assets of $350,000,000; sales of $250,000,000; ingot capacity of 4,900,000 tons. Leading steel companies (ingot capacity) become:

United States Steel .	20,105,749
Bethlehem . . .	8,000,000
Republic	4,900,000
Jones & Laughlin. .	3,270,000
Youngstown Sheet & Tube	3,000,000

As Mr. Eaton controls large holdings in Youngstown Sheet & Tube and in the Inland Steel Co., it was considered possible that these two companies would later be merged with Republic Steel Co., a combination which would have an ingot production of about 10,000,000 tons and replace Bethlehem as second largest steel company . . .

Why. The Republic merger was officially explained as an attempt to stabilize the steel industry. But those who saw in it a forerunner of other Eaton-inspired steel mergers considered that Mr. Eaton was laying the foundation of a steel structure which might eventually rise even to those heights now reached only by the United States Steel Corporation itself. Also, the larger the company, the more it will cheerfully spend on expensive technical research.

CAN, THERMOKEPT IN BRITISH FIELD

Who. The British Can Co., representing a union of British Shareholders Trust, Ltd., the Thermokept Corp., and American Can Co., largest U. S. can-maker, whose profits are about $20,000,000 per annum. American members of the directorate included H. W. Phelps and Harry Craver, president and vice president of American Can, and George K. Morrow, of Gold Dust and United Cigars . . .

What. Equipped itself to make all kinds of cans, using patents and processes of American Can Co. and Thermokept Corp. . . .

Why. "It marks a long stride in the manufacture of tin cans in the British Isles."

ZINC CARTEL TO END AFTER DIFFERENCES

Who. The international zinc cartel, in which American interests participated, and which was regarded as one of the strongest examples of the European post-war cartel movement. . .

What. Agreed to its demise, by failing to renew the convention which expired Dec. 31 . . .

Why. Because of lack of prosperity, resulting from world-wide overproduction of zinc (the biggest mining areas being the United States, Mexico and Australia), and internal dissension. European members objected to American (including Canadian and Mexican) zinc shipments to Europe; American members disapproved request of Norway and other European zinc producers for enlargement of quota.

A Banking Merger
of National Significance

The First National Bank *of* Boston and Old Colony Trust Company have merged forming a banking institution which ranks among the largest in the United States. The First National Bank of Boston has been preëminent in its territory in the fields of commercial and foreign banking. Old Colony Trust Company has been preëminent in the administration of individual and corporation trust services.

The union of the two provides complete and unexcelled service in every department of modern banking.

Foreign Branches
Buenos Aires, Argentina
Havana, Santiago, Cienfuegos
and Sancti Spiritus, Cuba

Head Office
67 Milk Street
Boston

European Representatives
London, 24, Old Broad Street
Paris, 39, Rue Cambon
Berlin, 52, Unter den Linden

INVESTMENT BANKING

The First National Corporation and Old Colony Corporation have united to form The First National Old Colony Corporation. It offers to individuals and corporations a complete service of investment through its own offices in leading American cities. Its offices are interconnected by a private wire system providing speed and accuracy in its transactions.

Head Office: 67 Milk Street, Boston

New York
Philadelphia
Baltimore
Washington
Atlanta

Chicago
Cleveland
St. Louis
Pittsburgh
Hartford

The FIRST
NATIONAL BANK *of*
BOSTON

AND ITS AFFILIATES

Old Colony
TRUST COMPANY

The
FIRST NATIONAL
OLD COLONY
CORPORATION

Combined Capital Assets $115,000,000

A Budget for a $25,000 Income in Chicago

How a tithe cannot be saved. The cost of parties at home and His Implacable Necessity, The Doctor.

BEFORE we were married, Anne and I were certain that when I earned $15,000 a year we could live in regal splendor. That was ten years ago. Today we have two children, and have to check the grocery bills to do it on $25,000.

Here's the situation: my salary is $15,000, and my revenue from securities gives the other $10,000. Clearly we can't talk about what we want to do with our money until we've disposed of the things we *have* to do with it. First, income tax: after making all proper deductions, I have to pay the government about $830. Second, insurance: you'll admit that $1,000 a year is modest, and the same for $2,500 savings. Sound economics would increase the latter from a tenth of our income to a third, but hopes of inheritance have scaled it to the minimum. Taxes, savings, insurance: $20,670 left, and December still twelve months away!

Household

Much the larger half of this $20,670 must go to household expenses, and it does. We hadn't the capital to build a home, our families didn't give us one, and we couldn't afford to run it if they had, what with caretakers, janitors, property taxes and fuel, so we rented an apartment on what real estate agents like to call "the smart North side". $333 a month, $4,000 a year, the building doesn't even have a proper doorman, but presto!—the $25,000 is less than $17,000 before we've had a scrap to eat or a shirt to our backs.

Obviously, somebody's got to cook the scrap and somebody's got to put it on the table, shake up the beds, and break the glasses. Add a nurse for the youngster (our eight-year-old's at the Chicago Latin School, with his tuition cracking $500) and away goes $3,300 for service alone. This may seem high to some of our friends, and of course I suppose Anne could take care of the children herself, but it does seem as if she ought not to have that eternal responsibility, and no hostess may excuse herself properly between soup and nuts to quiet the nursery.

Then the food itself runs to more than $200 a month, not counting the dinner parties at home. It is entirely false to assume that we will be reimbursed for the dinners we give by the dinners we get from others. Food, then, is $2,600 per year, just for ourselves. Mark you, this is allowing only $7 a day to feed seven people! Of course, if Anne fails to count the vegetable and soup cans, and doesn't remind the cook that yesterday's roast is today's hash, the food bills could easily be twice as large. I know that such petty vigilance and economy have come hard to a girl accustomed only to pushing buttons and giving orders, but unless she learns to practice them, she loses an extra opera cloak or a more expensive car. Accordingly, she can hold gas and light bills inside of an annual $300. Perhaps it is too much to expect her to turn out the bedroom light when she goes in for a tub, but she can certainly see that lights don't burn all night in empty rooms. The same for the telephone: if Anne would swallow her pride and install a nickel-in-the-slot device, she'd not only add considerably to her luxury allowance, but avoid the catastrophe that happened to a friend of ours, who didn't stumble on the sentimental long distance interludes of his lonely parlor maid until they had cost him $100 in a single month. As it is, our phone stands us, together with an occasional telegram or cable to our Europe-doing relatives, about $200 a year.

Six hundred dollars is none too much for laundry, nor is $350 for pressing and cleaning. When you remember that we're trying to keep our end up in the younger married set,

BUDGET FOR A YOUNG MARRIED COUPLE IN CHICAGO SOCIETY

TAXES: (Income, earned $15,000, unearned $10,000)		$ 830.00	
INSURANCE		1,000.00	
SAVINGS		2,500.00	
			$ 4,330.00
HOUSEHOLD EXPENSES:			
Rent		$4,000.00	
Food		2,600.00	
Power, Gas, Light		300.00	
Servants		3,300.00	
Laundry		600.00	
Pressing and Cleaning		350.00	
Upkeep		400.00	
Telephone		200.00	
Miscellaneous		200.00	
			$11,950.00
OTHER NECESSITIES:			
Clothes—for Anne	$1,500.00		
for Children	500.00		
for Me	500.00		
		$2,500.00	
Doctor		500.00	
Dentist		200.00	
School		500.00	
Pocket Money—Anne	200.00		
Me	300.00		
		500.00	
Automobile		750.00	
			$ 4,950.00
GOODWILL:			
Friends		300.00	
Donations		500.00	
Clubs—Dues and Expenses		1,000.00	
Dining		312.00	
Theatres and Subscription Dances		158.00	
Liquor and Tobacco		500.00	
			$ 2,770.00
EMERGENCIES AND LUXURIES:			1,000.00
			$25,000.00

A Train

. . . that connects with Twenty Million Homes

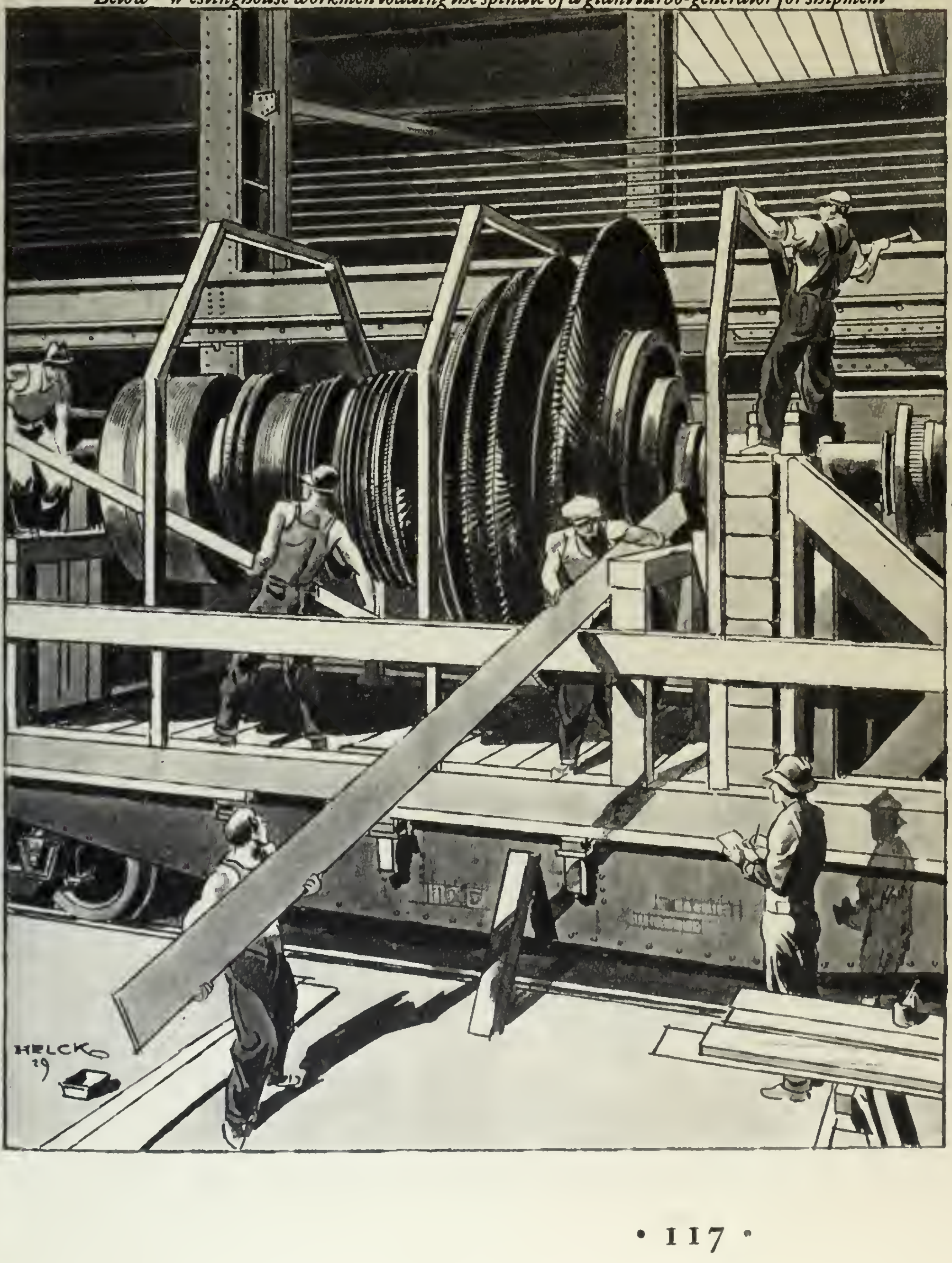
More than a hundred miles of freight cars must ride the rails each year to distribute equipment that Westinghouse manufactures. Electrical products closely connected with the life of the nation's twenty million homes stream out from Westinghouse plants in dozens of car loads every day.

At one loading platform, for instance, you see a group of workmen loading the spindle of a giant turbo-generator. It is being started on its way to flood a distant city's homes with cheerful light.

And so it is with other apparatus. Electric appliances carry new freedom to mothers in homes. Industrial motors help factories to put new convenience in reach of homes everywhere . . . and workmen are helped by means of electrification to increase their earnings and raise their standards of home living.

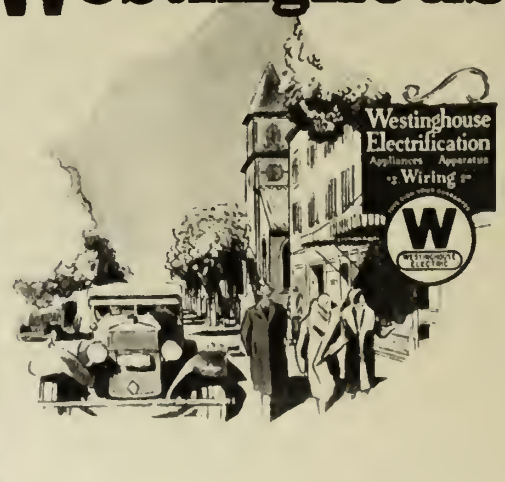
Whenever you see the sign of a Westinghouse Electrification dealer, you see the signature of a service that is helping electricity to give you more for the time, effort, and money you spend. As electricity does more you can buy more.

Below—Westinghouse workmen loading the spindle of a giant turbo-generator for shipment



Electric power builds buying power

Westinghouse



it's plain that soiled shirts and spotty frocks would lose us more than we'd save. Similarly, $400 goes to put the apartment in shape: waxing floors, new curtains, repapering, and the various things we might argue out of the landlord if life were longer.

Next come the thousand and one little whatnots that drain your pocketbook dime by dime, quarter by quarter, until they finally run into a couple of hundred dollars. I mean the magazines, silver polish, cosmetics, toilet articles, writing materials, and all the rest of their tribe. For instance, a subscription to the Chicago *Tribune* costs $12.50, and there are at least five other publications that you have to take to keep in step. Believe it or not, $200 a year is putting it mildly, and the only way you can do it on less is to grow a beard.

Rent, food, servants, power, laundry, pressing and cleaning, upkeep, telephone, miscellany—the total runs to $11,950 a year, or nearly my entire salary, and, my compliments to Anne, it requires skillful housewifery to do it on that. We are now left with less than $9,000 to provide for all the rest, which includes the ills as well as the amenities of life.

Other necessities

Of the remaining $8,750, at least $500 must be set aside for His Implacable Necessity, The Doctor, and $200 for H.I.N., The Dentist. Our younger child was born four years ago at a total cost of more than $500. A tonsil operation cost, in all, $200; the abstraction of one of our four appendices, $400; and upon a slight astigmatism to which I must personally plead, I have spent some $200 during the last four years. Of course, to some the oculist is a necessity, while the psycho-analyst is a delightful luxury, so that no budgets will be the same. But a touch of flu for father and of croup for baby may be regarded as characteristic of our kind, and these added to the less universal ailments wherein we exhibit our individuality take a remarkably steady toll of $500 from the income of those who do not desire bargains in doctors.

The economics of our little roadster need little examination—$750 per year should take care of it and buy a new one, although it must be confessed it is our pleasure to buy somewhat more frequently than this allowance would literally justify. As to pocket money, both Anne and I realize that more than the allotted $500 dribbles from us, and we suspect that we must win more at bridge than we lose.

To the matter of clothes, we have given serious attention. An ordinarily good New York dressmaker estimated that her clients spent from $2,000 to $7,000 a year on clothes. But many well dressed women spend less. Take Anne, for instance, on her $1,500, and see what she does with it:

Winter suit	$150.00	
Afternoon gown	100.00	
2 Dark dresses, new or made-over old ones	60.00	
Spring or summer suit	90.00	
5 Sport dresses @ $30	150.00	
2 New evening dresses	$300.00	
2 New evening dresses home made or bought at sales	100.00	
2 Remodeled evening dresses	50.00	
Total:		$1,000.00
Hats, 3 winter and 2 summer	70.00	
Shoes—bought only at sales:		
4 prs. evening shoes	50.00	
2 prs. heavy shoes	20.00	
4 prs. fancy day shoes	40.00	
Bedroom slippers, tennis shoes	15.00	
Total:		$ 195.00
Stockings at $1.75 a pr., 3 doz.	63.00	
Bags, gloves, beads	55.00	
Lingerie: As Anne would scorn buying her undergarments off the bargain counters, she has the child's nurse make her chemises and nightgowns at home, the lace for which she begs off the family, who buy it at a reasonable figure in Paris at bargain counters. With crepe de chine at $3.50 a yard, she probably averages	100.00	
Luckily, she wears only three pieces of underclothing at any one time.		
Total:		$ 218.00
Grand total:		$1,413.00

With $87 left, she will get a new motor coat if her old one bores her too much; or she may buy brocade and fur for an evening wrap; or a shawl for summer evenings; or have her fur coat made over; or she may deposit it at the savings bank to swell the fund for a new fur coat. By the time she has saved eight hundred dollars, the sealskin coat her uncle gave her for a wedding present will have been remodeled seven times, and it will probably finish its long life keeping the daughter warm when she skates to school.

It amuses Anne to be seen at Madame Lazarre's where nothing costs less than four hundred per garment, but she knows that a hundred dollars on her figure and with her bluff will do almost as well.

Though Anne takes $1,500, I manage on $500, and $500 takes care of the children. My purchases are more or less as follows

10 Day shirts @ $2.00	$ 20.00	
2 Evening shirts	10.00	
1 white vest	10.00	
15 ties @ $2.00	30.00	
6 underwear suits	12.00	
3 prs. shoes @ $12	36.00	
4 hats	30.00	
12 prs. socks	12.00	
2 suits	200.00	
1 coat	$80.00	
2 prs. white flannels	30.00	
1 sweater	20.00	
Miscellaneous	10.00	
Total:		$ 500.00

We have thus completed the analysis of all the so-called Necessities, and we find ourselves with $3,770 left for Good Will, Emergencies and Luxuries.

Good Will

Many are the expenses which business happily taught me to classify as Good Will—the things that keep peace on earth and oil in the social machinery. Presents, for example: Anne's birthday, our wedding anniversary, the children's birthdays, Christmas, and other people's weddings. The maids and the elevator boy would be surprised if Anne forgot to put something in their hypothetical stockings. Friends can scarcely be retained with less than a $300 investment. Contributions to our church, to our political party, and such sound civic enterprises as the Field Museum, the Art Institute, the Chicago Historical Society, the Junior League and the Service Club, the tickets to the Harvard Hasty Pudding, the Yale Glee Club, or the Princeton Triangle performances, will barely be covered by $500.

On the less frivolous side, my business requires membership in at least one good lunch club, because there's lots of good will in a good meal, and a ripe cigar may be the straw that breaks a camel's sales resistance.

There was no use in having my name put on the Chicago Club waiting list because it's too hostile to resident non-members for me to ask them in for a bite to eat or a highball. The University Club—$200 dues—is more cordial, while the club we entertain in is the Casino, which this year costs us $270, because of an extra assessment. For health's sake, I can't afford to drop my golf, and Anne likes to play occasionally herself. I find myself paying about $400 a year for this good cause. $1,000 won't take care of all club dues and incidentals.

Whether we dine our guests at home or at the club, the cost averages two dollars per person. Here is Anne's typical dinner for twelve. The food tastes better than at the club, but most of our friends would rather go to parties at the club.

Dinner for twelve:

Appetizers	$ .60	
Soup, clear	1.40	
Rolls and butter	1.00	
Turkey	9.00	
Mushroom sauce	.60	
Vegetables	3.00	
Salad with mould	1.50	
Cake	1.00	
Ice cream	2.50	
Coffee, cream	.40	
Extra waitress	3.00	
Total (without liquors)		$24.00

Last year we had a hundred and fifty-six guests. This counts ourselves as guests, since

[*Continued on page 162*]

"*Sound Sleep* is more necessary than exercise or food," *says* GENE TUNNEY

"I envy Gene Tunney his nerve control more than his strength or agility. On the day before his contests, and on the morning thereof, he was as calm and self-possessed as if nothing unusual were going on," wrote William Lyon Phelps in Delineator for July. And in maintaining this nerve control Gene Tunney considers sleep an important factor.*

The retired world's champion comments on sleep

"WHEN preparing for a competition in which physical endurance and mental alertness are required, sound, undisturbed sleep is more necessary than exercise or food.

"Little exercise, proper diet and lots of sleep are far more beneficial than lots of exercise and food, and little sleep.

"Exercise and digestion consume nerve-energy which is the motive power of the living machine—Man. Sleep and rest are the mediums through which this destroyed nerve-energy is restored.

"A wise athlete when preparing for athletic competition makes it a rule to get ten hours of sleep and rest a night. This long rest after the hard daily grind will completely refresh his nerves and fit him for the next day's grind, gradually conditioning him for the great event—the contest.

"It is my belief that all youths should get at least ten hours of sleep daily. Growing children need as much rest as hard-training athletes, for like the athletes, they are constantly exerting themselves and need a long period of rest and sleep to recover destroyed energy, and thereby enable their growing and developing processes to function in a healthy and normal manner."

• • •

*The Simmons Company, 666 Lakeshore Drive, Chicago, Ill., will send on request a reprint of this article, "Gene Tunney Shows The Way."

SIMMONS, largest makers of beds, springs and mattresses, have developed scientifically the sleep equipment for complete relaxation and healthful sleep—in two price ranges:—Simmons Beautyrest Mattress—hundreds of sensitive coils under thick layers of upholstery, damask covers—$39.50; Ace Box Spring, $42.50; Ace Open Coil Spring, $19.75. The new Deepsleep Mattress—another inner coil mattress at a popular price, $19.95; Deepsleep Box Spring, $27.50; Slumber King Spring, $12.00. The Simmons Company, New York, Chicago, Atlanta, San Francisco.

SIMMONS

BEDS · SPRINGS · MATTRESSES

BERKEY & GAY FURNITURE

Copyright 1930, The Simmons Company

FILLETS OF HADDOCK, ON THEIR WAY TO THE CRYSTAL FREEZING ROOM IN THE ATLANTIC COAST FISHERIES

A Second Ice Age

(Continued from page 62)

The fish industry knows the answer. The meat industry is learning it. The vegetable and berry growers are less puzzled about it than they were. The answer is: by freezing. But not by freezing in the ancient sense; by *freezing with a difference.*

Frozen meats and fish have been handled commercially for a long time—since 1860 at least. In 1927, in the United States, 170 cold storage warehouses froze approximately 125,000,000 lbs. of fish. 700,000,000 lbs. of meat were frozen in the same year. Huge quantities of cold storage meats and fish are eaten annually in the civilized world. And the Metropolitan Purchaser does not like them. She refuses to buy them when she knows what they are. And she is right. For meat and fish frozen in the ordinary way—i.e. "air-frozen" or "slow-frozen" or "sharp-frozen"—deteriorate in the frozen state and on defrosting. They dry out; the fats oxidize; and enzymic (or self-digestive) action occurs. Also large crystals of ice form in the cells, rupturing the walls and permitting the nutritive and flavoring juices to drip away.

The discovery which enables the fish industry to sell its packaged fillets of fresh fish was the discovery of "quick freezing". Quick freezing means freezing by direct immersion in a liquid refrigerant such as sodium chloride brine or by indirect contact with a very cold liquid refrigerant such as calcium chloride brine. Its effect is to do in approximately one hour what is done in sharp-freezing in from 10 to 48. Since the size of a crystal depends upon the time allowed for it to form, and since, in quick freezing, the flesh to be frozen takes 25 minutes to pass through the zone of maximum crystal formation as against about 350 minutes in sharp freezing, the crystals formed in quick freezing are smaller and will not disrupt the cell tissue. Similarly the more rapid drop of temperature carries the flesh to be frozen more rapidly to the point at which bacterial action is suspended (25° F.), enzymic action stops (15° F.) and oxidation of fats ceases (Zero F.). So far as desiccation is concerned, if the flesh to be frozen is first wrapped in moisture-proof vegetable-fibre parchment, as in the patented Birdseye system used by General Sea Foods Corporation (General Foods) and then boxed and frozen, practically no shrinkage takes place.

There are four quick-freezing systems in common use, all having in common a purpose to eliminate air between the freezing agent and the object to be frozen—air being a bad conductor. In the first, the object to be frozen, say a fillet of haddock, is directly immersed in, or sprayed with sodium chloride brine. In the second, the fillet is placed in an especially shaped can (a different shape for each product) and sprayed with, or immersed in calcium chloride brine. In the third (used by the Atlantic Coast Fisheries at Groton, Connecticut), the fillet is placed on the surface of a metal plate, the under side of which is in contact with calcium chloride brine. In the fourth (the Birdseye system), the fillet is carried between metal belts both of which are in contact with a refrigerant. Both the latter systems give excellent results. General Foods Corporation is particularly proud of the fact that one pound of its pre-wrapped product requires but 26 cubic inches of packing space as against 75 cubic inches required by one pound of the Atlantic Coast product, because the fillets are packed first, and freeze and expand in the package, the shape of which is regulated by the belts.

Shipment is made in insulated cartons. General Sea Foods is able to ship considerable distance in winter without ice. In warm weather ice is used. Atlantic Coast Fisheries requires refrigerating cars, due to its method of packing after freezing, and has secured exclusive rights to the use of Silica Gel cars for the transporta-

[*Continued on page 124*]

ROYAL RM MASTER

ROYAL RM MASTER

When you draw up at the curb before Pierre's on Park Avenue, or find yourself idling at the wheel before The Breakers at Palm Beach . . . even the most insolent appraisal of your new car must soften to a look of admiration if the tires are Royal Masters. Their unstudied smartness . . . their faultless traction . . . their superb endurance, all bespeak the patrician. And among those who can afford to be extravagant . . . or not, as fancy dictates . . . it is rumored (and truly so) that the Royal Master is likewise a surprisingly economical purchase on a miles-per-dollar basis. Which is only logical, for the Royal Master is the world's finest tire, built by the world's largest producer of rubber.

UNITED STATES RUBBER COMPANY

Strong to Stand Up in the Battle of Big Business

Check up on yourself. How many times in half an hour do you push back your office chair, tilt back, wiggle the arms, hitch over to the right, then to the left?

Active human beings are constantly on the move, even when they are supposedly sitting still at a desk. Each movement brings a strain, a definite wearing action on the chair.

Under the daily strain of use chairs loosen up, wear out, that is, unless they are chairs of Alcoa Aluminum. They are welded into one continuous piece of metal. No screws to squirm loose, no glued-joints to dry out and squeak.

With all their strength, Alcoa Aluminum office chairs are also feather light, fire-safe, long-lived. They offer you substantial upkeep savings.

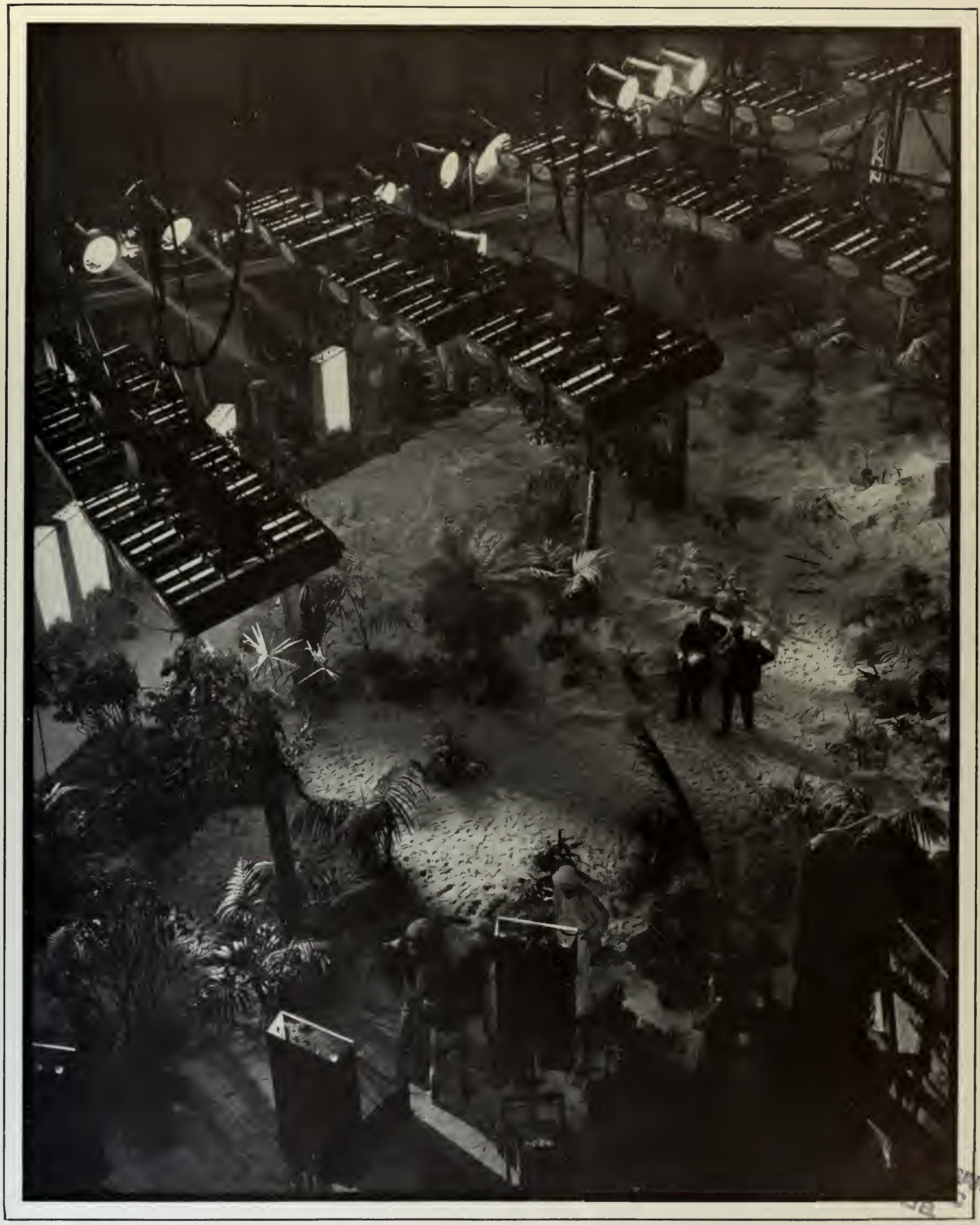
You can get these modern chairs in natural Aluminum finish or wood grain finish to harmonize with any office. The beauty of the natural Aluminum finish lies in its simplicity, its modernness, its clear, soft sheen. These chairs are upholstered in full grain mission leather in either green, blue, brown or maroon.

The same upholstery can be had in Alcoa Aluminum chairs finished in walnut, mahogany and oak wood grains—also in two shades of green enamel.

A wide variety of styles and types of executive, clerk and stenographic chairs are available. A special brochure "Distinctive Aluminum Furniture for the Office" is now available for distribution. Let us send you a copy.

ALUMINUM COMPANY OF AMERICA
2402 Oliver Building, PITTSBURGH, PA., Offices in 19 Principal American Cities

CHAIRS OF
ALCOA ALUMINUM



Scorching sun, burning sand and the cool relief of palms—not often is the godlike creation of Nature by man's mechanism shown so graphically as here. The creators were the W. P. Films Co., revampers in Britain of America's tempestuous *White Cargo.*

The photograph also illustrates the valiant efforts of the British film industry to produce better pictures—and to make money. Though silence was not particularly golden for British films, sound nearly broke the industry.

The British Hollywood is at Elstree, where the above still was taken, twenty miles from London. Except for the huge iron-roofed sheds of the three companies already operating there, it is a quiet Hertfordshire village with little social life.

ESTABLISHED 1818.

Brooks Brothers,
CLOTHING,
Gentlemen's Furnishing Goods,
MADISON AVENUE COR. FORTY-FOURTH STREET
NEW YORK

This Establishment has been operated continuously for more than a Hundred and Ten Years and is still in the control of the Direct Descendants of the Founder

Our Representative
will visit the following cities
during the season to
take orders for
Ready-made Clothing
Furnishings, Hats and Shoes
for Men and Boys
Trunks, Bags, Leather Goods
and Liveries

If you will write us mentioning FORTUNE we shall be glad to let you know the dates on which he will be in the city nearest you

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Chicago
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Detroit
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Houston
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New Haven
New Orleans
Norfolk
Philadelphia
Pittsburgh
Princeton
Providence
Richmond
Rochester
St. Louis
San Antonio
Syracuse
Toledo
Tulsa
Washington

We are Manufacturing Retailers only: Established 1818. We have no agents except our own Travelling Salesmen and we maintain no branches except our Stores in

BOSTON
Newbury corner of Berkeley Street
NEWPORT **PALM BEACH**

A Second Ice Age

(*Continued from page 120*)

tion of fish throughout the land.

In the meat packing industry quick-freezing is still in the experimental stage. With red meats there is a difficulty over and above those experienced in the quick-freezing of fish in that such meats tend to change color as they thaw. Most of the big houses are, however, definitely committed to the undertaking. Batchelder & Snyder, the packing subsidiary of General Foods, has frozen "everything from moose to porpoise" with the Birdseye machine and intends to prepare packaged frozen chops. Swift & Company are producing a complete line of lamb and pork chops, steaks, liver and sweetbreads, which they intend shortly to put on the general market. Geo. A. Hormel & Co. are about to undertake large scale experiments. Armour is already so engaged. Ford-Gustavson Co., Swift & Co., Fairmount Creamery and Armour & Co., are selling quick-frozen poultry. But the problem, from the meat packer's point of view, is by no means simple. In addition to the "bloom" of the meat and the mechanical obstacles to be overcome, there are the retailing difficulties. The public aversion to "cold storage meat" must be surmounted—possibly by advertising the fact that it is already used in many a good hotel. The public must be persuaded to pay an *apparently* higher price for an individually-packaged, frozen chop than for a fresh chop (the *actual* price per ounce of edible meat is lower because all waste is trimmed away at the packing house). Refrigerating counters must be provided, and the whole retailing organization must be rearranged, for packaged cuts, from which a waste has been removed, deprive the butcher of the margin of profit he now makes in charging for weight he later trims away.

The selling of packaged frozen berries and vegetables is also in the experimental stage. Approximately 4,250,000 gallons of strawberries were frozen-packed in the northwest in 1928. These berries, which change color on defrosting, but retain flavor and aroma, are widely and successfully used in baking and in ice creams, etc. Other berries, particularly raspberries, are successfully frozen and marketed. With vegetables it has been found that, though flavor and color can be retained, texture alters due to the fact that vegetable cell walls are rigid and will not yield to the pressure of the crystals formed. Asparagus collapses. Corn on cob goes soggy. String beans are "slightly limp". (But on the other hand peas are "equal to cooked fresh peas in all respects".)

But with the exception of the texture of fruits and vegetables, the technical difficulties in the way of the successful quick-freezing of perishable goods seem to be surmounted. Harden F. Taylor, vice president in charge of research at the Atlantic Coast Fisheries, has completed experimental work which seems to prove that even with quick-freezing and the unbroken cell wall, there is still a leakage by osmosis in defrosted meats and fish. This he attributes to the fact that, at death, and due to fatigue from the struggle preceding death, the gelatinous substance contained in the cell breaks up into a liquid and a stiff rubbery mass, and that the liquid tends to escape. His cure, now in use at the Atlantic Coast, is a patented chemical bath which restores the homogeneity of the cell content. Other manufacturers, however, report no shrinkage in their product.

The difficulties in the way of retailing remain considerable. Quick-frozen foods must be held at temperatures of 15 to 20 degrees Fahrenheit. They must be displayed, for it is only by appeal to the eye that the frozen lamb chop can surmount the general prejudice against frozen meat. The display case must be protected against loss of cold and formation of moisture, fogging the glass. It must be so built that the chilling unit can be defrosted without raising the temperature of the case. And it must be capable of very low temperatures. The General Electric Company is now at work on such a case as are other manufacturers. The question whether it can be manufactured at a cost within the reach of small retailers remains open.

Assuming, as the facts permit, that the major problems will be solved, it is obvious that economic consequences of the first importance will follow. The Atlantic Coast Fisheries ship, in hermetically sealed, vegetable - parchment envelopes, frozen fillets of boneless, skinless haddock reposing upon their own obituaries in the form of recipes upon a waxen card. Silica Gel Refrigerator cars transport them to Fort Worth. There they may be

sold!

18% of all american motor cars

30% of one company's baking powder

24% of all american sewing machines

35% of one maker's razor blades

30% of one company's facial cream

44% of all american typewriters and accessories

in foreign markets

For years the principal exports from the United States were foodstuffs and raw materials. Now over 50% of our products sold in foreign markets are manufactured articles.

This trend is indicative of the growing opportunity that exists for the continued expansion of American business. For many products the present problem is one of intensifying activity in those markets where an investment will bring the most immediate return. The countries requiring more intensive cultivation can follow in order of their importance.

● An intimate knowledge of the determining factors can only be ascertained by investigations conducted within each country. The methods to be pursued in developing intelligent promotion must also rest on facts brought to light through local surveys.

Through fifteen main offices and ten sub-offices, covering fifty-eight nations, the J. Walter Thompson Company offers a world-wide system of market analysis and foreign advertising—an organization manned largely by native personnel operating under the direction of Americans. The total population covered by these offices is six times as large as the United States; the per capita buying power is far higher than generally realized.

● Through these foreign offices, the J. Walter Thompson Company offers American business accurate surveys. In advance we can locate markets, determine their importance, and forecast the investment necessary in sales promotion and advertising.

For full information please write us direct at our New York address.

J. Walter Thompson Company

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Chicago, Boston, Cincinnati, San Francisco ● Montreal, Canada ● London, Paris, Madrid, Berlin, Stockholm, Copenhagen, Antwerp, Warsaw ● Alexandria, Egypt; Port Elizabeth, South Africa ● Buenos Aires, Argentina; Sao Paulo, Brazil ● Bombay, India ● Sydney, Australia

PRODUCTION CURVES START DOWNWARD WHEN FATIGUE BEGINS

Every day, about mid-afternoon, fatigue strikes the employees in many factories . . . production slows down . . . costs increase . . . profits decrease.

Why? Experience shows that it is mainly caused by improper flooring . . . cold, non-resilient, unpleasant flooring.

Hard Maple reverses these conditions. It eliminates employee fatigue because it provides floors that are warm, dry, resilient and comfortable . . . floors that assure good health and good work.

Northern Hard Maple Flooring will not only help overcome employee fatigue, but will also bring you years of satisfaction. Northern Hard Maple is remarkably durable—actually outwears stone. It does not sliver, splinter or develop ridges. Even heavy rolling trucks do not mar its smoothness. It is exceptionally easy to keep clean . . . offers no open lodging places for dust, dirt and germs. And, unlike stone-type materials, it provides a floor that greatly simplifies alterations. You can lay Northern Hard Maple right over your present floor—no matter if it is of non-wood material. Why not plan now to enjoy the advantages and economy this finer flooring brings? Write, and let our Service and Research Department assist you.

MAPLE FLOORING MANUFACTURERS ASSOCIATION
1781 McCormick Building, Chicago, Illinois

The letters **MFMA** on Maple, Beech or Birch flooring signify that the flooring is standardized and guaranteed by the Maple Flooring Manufacturers Association, whose members must attain and maintain the highest standards of manufacture and adhere to manufacturing and grading rules which economically conserve these remarkable woods. This trademark is for your protection. Look for it on the flooring you use. **MFMA**

Floor *with* Maple

distributed, like envelopes of peanuts, through any retailer who has a cold counter to keep them in, or delivered directly to the domestic Frigidaires. The Fish Shop need not handle them at all. Or Batchelder & Snyder, at some date to come, ship from their packing plant in waxed, glazed, trademarked paper cartons, lamb chops, spareribs, roasts, steaks, chickens, liver. The drug store handles them, the A. & P. The rendering is done at the packer's plant. There is no need of butchers and the balanced cleaver follows the hand-loom and the glass-blower's pipe. There are no scraps, no waste (the Airedales take to biscuit, creating a new market for the mills). Or the Everett (Washington) Cold-Pack Plant ships out directly to its housewife customers in Maine, "bottles" of strawberries (no longer blue), wax-paper jars of peas ("equal to cooked fresh peas in all respects") and beans, not limp.

Various consequences follow. Electric refrigeration in the home becomes a necessity and the most perishable foods are bought, frozen, in large quantities, kept until needed, thawed, and eaten as though fresh. The "preserved" taste vanishes from foods previously canned (although the canned asparagus retains its place: the public prefers the tinned taste to the fresh). In the towns, Liggett's (drug stores have in general better refrigerating equipment than grocery stores) becomes the general store, displacing the butcher shop and the fish market. There the housewife will buy sassafras, aluminum pots, gramophone records, Ford tires, lamb chops, Lucky Strikes, porterhouse steaks, toys, trout, and frozen fruit (ready to be eaten cold, as a dessert, or thawed and rinsed, as fresh apricots). The packers are enabled to pack, rapidly and simply, large quantities of perishable foodstuffs with a relatively small investment for machinery and containers. Their equipment becomes more elastic and is better adapted to surplus crops. They are able to receive the heavy August and September runs of fancy grass-fed cattle which, because of their watery flesh, are useless for slow freezing, butcher them, quick-freeze the cuts and so stabilize the price to the producers. So also the fish industry wipes the shadow of Friday from the sea and changes the price of fish which now runs from 4c Monday to 12c Wednesday to 1c Saturday, to an even weekly price. (And conceivably the price to the consumer falls.)

The ice of the second Ice Age, like that of the first, is in movement. Some that are now mountains may well be lakes when it is past. Continents will alter, and geologists study, as now, the ice-scratched rocks of Illinois, the heaped-up cities that will be its high moraines.

Orchids

(*Continued from page 96*)

individual water bottle with a cork that does not leak. Bound Brook plans to use the airplane. It is beginning to advertise. It has become, in fine, big business.

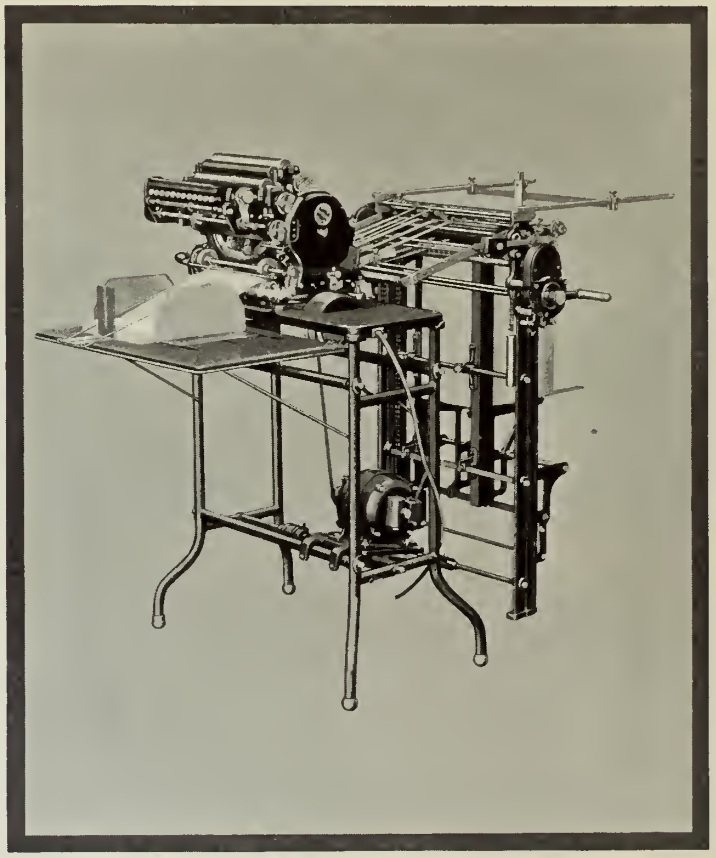
As such it has been recognized, for something less than a year, by the holding companies of the house of Charles D. Barney & Co. In the strong-boxes of Selected Industries, Inc., the securities of Thomas Young Nurseries rest without discrimination beside those of the Kraft-Phenix Cheese Co. and other businesses somewhat more basic than orchids. Nor is the flower business in any sense a mere hobby. A rough estimate of the value of cut flowers sold in the U. S. reaches $400,000,000 annually. When Mr. Bunker obtained an option on the nurseries and set out to interest Charles D. Barney & Co. in the purchase, he may have found an initial disinclination to regard the orchid seriously, but he was able to convince the Barney house that $2,500,000 was not too large an investment.

This was in May, and by winter, Charles D. Barney & Co. had no reason to regret their decision. For the net profits of the Thomas Young Nurseries (85% orchids, 15% gardenias) in 1929 were not less than $750,000 and may have reached $850,000. Even after all possible effects of the October market break have been discounted, the investment remains a good one.

Mr. Bunker is a promoter and a manager. His approach to orchids last spring differed not at all from his earlier approach to oil or lead. Seeing the possibility of turning a disorganized business into an efficient producing and distributing unit, he proceeded to bring to the Thomas Young Nurseries all the advantages of Wall Street capital and management. He labored in an office, at 120 Broadway, not far from the building where Jay Gould sat and dickered with agents for exotic flowers from far wildernesses. But the difference in the relation of these two men to the orchid is as wide as the differences in the centuries they inhabited. It is as wide as—and not unlike—the difference between haphazard fungus and the agar of the laboratories of Cornell.

PRINTING . . .

that pays for itself



PRINTING MULTIGRAPH

Speedy, abundant, economical printing means more in business today than ever before. Circulars to meet today's keener competition and get more business! Office forms to speed up routine operations and prevent confusion!

The Printing Multigraph has made it easier than ever before to meet modern requirements for a large share of business printing. It makes more printed sales helps available at moderate cost. It cuts the cost of office forms and simplifies the job of keeping adequate supplies at hand.

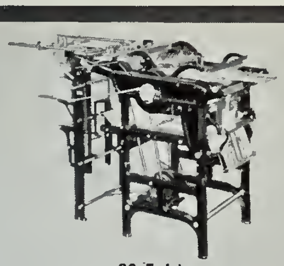
How much a Printing Multigraph will contribute toward increasing your annual net profit depends on your business. Many a Multigraph user will tell you that what he saves in printing costs combined with what his Multigraph material brings in as sales promotion return makes the machine pay its own way with a margin to spare.

Any Multigraph representative will be glad to quote specific figures on results in your own line of business. Look up our local address in your telephone directory—or write us direct.

DO YOU KNOW YOUR MARKET?

We have developed Multigraph equipment to meet the special requirements of today's business trends which put a premium on selective selling.

American Multigraph Sales Co.
1815 East 40th Street Cleveland, Ohio

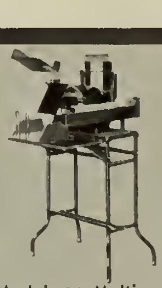


88 Folder

58 Folder

Lever Addresser

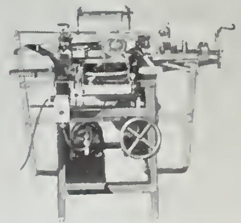
Model 60 Multigraph



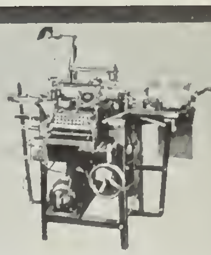
Model 100 Multigraph

— *The* MULTIGRAPH *Line* —

Addressing Multigraph



Lever Compotype



Keyboard Compotype

59 Typesetter

Set-o-type

THE WORLD'S MOST FAMOUS
(*and most imitated*)
PREPARATION FOR THE HAIR

DE QUININE
ED. PINAUD

Thick, luxuriant, dandruff-free hair . . . a scalp tingling with healthy vitality—this unique French compound worked out by Monsieur Edouard Pinaud some eighty years ago, is promoting both of these throughout the world today.

And no matter where you go you can find imitations of it on sale . . . imitations made without even the faintest idea of what the Pinaud formula really is . . . imitations whose makers know only that somehow the Pinaud formula does do marvelous things for the hair—and that almost any kind of concoction can be marketed (for a while, at least) if put up in a similar bottle with a label that looks something like Pinaud's Eau de Quinine.

That is why it will pay you to look for the name Pinaud when you buy Eau de Quinine—for just as imitators cannot copy the Pinaud formula, they *dare* not copy the Pinaud name.

For 150 years the House of Pinaud has been proud to offer the world just such products as this—products perfected often after decades of effort, with a superb disregard of time, of cost. Look for them at your favorite drug or department store.

Pinaud
PARIS · NEW YORK

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Radio Corp. of America

(*Continued from page 84*)

cal debates, its educational features, its crop reports for the lonely farmer, its Two Black Crows, its setting-up exercises and its bed time stories. Instead, presumably, he went songless to sleep.

The rapidly growing popularity of broadcasting meant a huge sale of radio receiving sets, which the Radio Corporation began to produce in corresponding quantities. By 1925 its gross income was $4,000,000 from transoceanic and ship radio service and $46,000,000 from the sale of radio equipment. In 1928 the transoceanic and ship radio service yielded $6,000,000 and the sale of equipment $86,000,000—proportion of 1 to 14. Thus what Woodrow Wilson achieved for the patriotic idea of a U. S.-owned radio communication service by ironic mutation became the means of national amusement. Indirectly, but none the less fundamentally, Wilson made possible the ascendancy of a star like Charles E. Mack, better half of the Moran and Mack team, and since his *entrée* into radio (the team is reputed to have been paid $7,500 a week for 26 weeks by Grigsby-Grunow, makers of Majestic Radio) undoubtedly better known to most U. S. citizens than any Senator except perhaps Heflin.

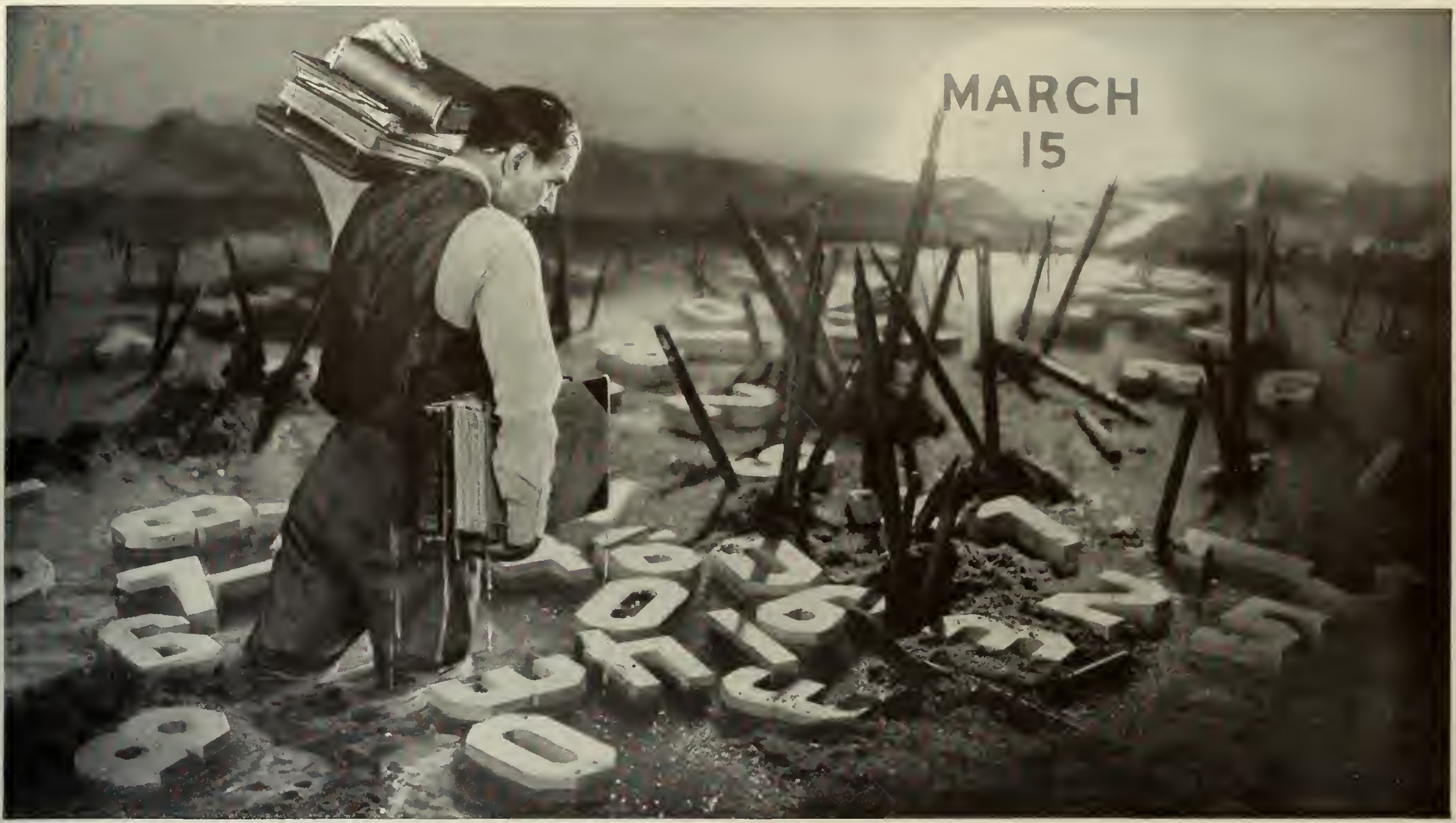
Here again was the unpredictable quality of electrical development opening up new commercial vistas for what began as a simple communications company. The Radio Corporation naturally commenced to build broadcasting stations and acquired a 50% interest in the National Broadcasting Co. It was only one more step to deal in talking moving picture equipment (RCA Photophone Inc.); yet another step to use the rights for this equipment to acquire and develop a great movie theatre-and-production company (Radio-Keith-Orpheum Corp.); one step further to enter the electrified phonograph business, by absorbing the Victor Talking Machine Co. (now RCA-Victor Company, Inc.); another step to acquire control of two Tin Pan Alley Music Publishers (Carl Fischer, Inc. and Leo Feist, Inc.); some day it will be a very small step to enter the field of television.

In short the Radio Corporation, set up as a communications agency, found itself transformed by the erratic genius of electricity into a great amusement company. It was no one man's intentional doing. With the change of its interests came a corresponding development of personnel. In 1923 Major General James G. Harbord became the president; in 1930, Chairman of the Board. Today Young heads Radio Executive Committee. Confining his interests mainly to the electrical manufacturing industry of which he is the acknowledged leader, he has also taken an active interest in the Radio Corporation's advance across fresh fields of enterprise. In the talking cinema Mr. Young anticipates a new art form reflective of modern American civilization. Major General James G. Harbord, not fundamentally a man of commerce becomes chairman. But when one looks for the really indigenous Puck in the Radio wood pile, one finds David Sarnoff. He will not be 39 until February 27th next. Thirty years ago at the age of nine he came to this country from his birthplace, Uzlian, near Minsk, Russia, where his parents had hoped that he would be a rabbi. At 15 he fell in love with radio and became an office boy to Marconi Wireless Telegraph Co. He was an ardent wooer; at 17 he was one of the fastest wireless operators in their service. At 18 he was managing the Sea Gate station, then the busiest in the country.

At 21, he had himself demoted in order to give himself time to study electrical engineering. As an operator in the high-powered station atop John Wanamaker's store, he first acquired international fame when the *Titanic* sank on April 15, 1912. Soon thereafter Congress ordered all sea-going ships carrying fifty or more passengers to equip themselves with wireless sets.

After that Sarnoff became Assistant Chief Engineer of the Marconi Wireless Telegraph Company, and his titles changed almost yearly in recognition of his unique ability. In 1919 he passed from Commercial Manager of the Marconi Company to Commercial Manager of the Radio Corporation, but his progress went on uninterrupted. He has been called General Manager, Vice-President, Executive Vice-President; last month he became President. Such is the new character which the unforeseen evolution of radio produced to play a prominent part at the curtain of the first act.

Before the curtain fell, however, a third figure—a third situation—moved softly out upon this fast-shifting scene to add a complication well known to Greek comedi-



Stay out of Income Tax Swamp this year

WILL the dawn of March fifteenth find you still wading through a noisome swamp of figures, perhaps bogged down and forced to call for an extension of the time limit for filing your income tax report?

Many businesses, large and small, are traveling directly to the goal along the Monroe trail which runs on solid ground of speed and accuracy.

And it's a simple trail—one your clerks can follow easily, without fear of mis-steps and with no delays, for Monroe figure methods and Monroe short-cuts applied by the Monroe machine produce first time, checked-as-you-go results. Monroe machines and Monroe methods simplify and speed up daily routine throughout the entire year so that needed figures are ready and waiting at income tax time, and the bookkeeping department is not disrupted by a last minute rush.

Your local Monroe representative will be glad to lend you a machine and show your own clerks how simple it is for them to apply Monroe time-saving short-cuts to any figure job.

The business figure knowledge of the Monroe organization, gained through its daily work with businesses of every size and type, is at your service.

Telephone our nearest office or mail the coupon below.

MONROE
HIGH SPEED ADDING·CALCULATOR
The Machine for Every Desk

SERIES 3
MONROE ADDING CALCULATOR
with full automatic division

Send this Coupon

MONROE CALCULATING MACHINE CO., INC.
Orange, New Jersey

We would like to try a Monroe Adding-Calculator for our income tax work.

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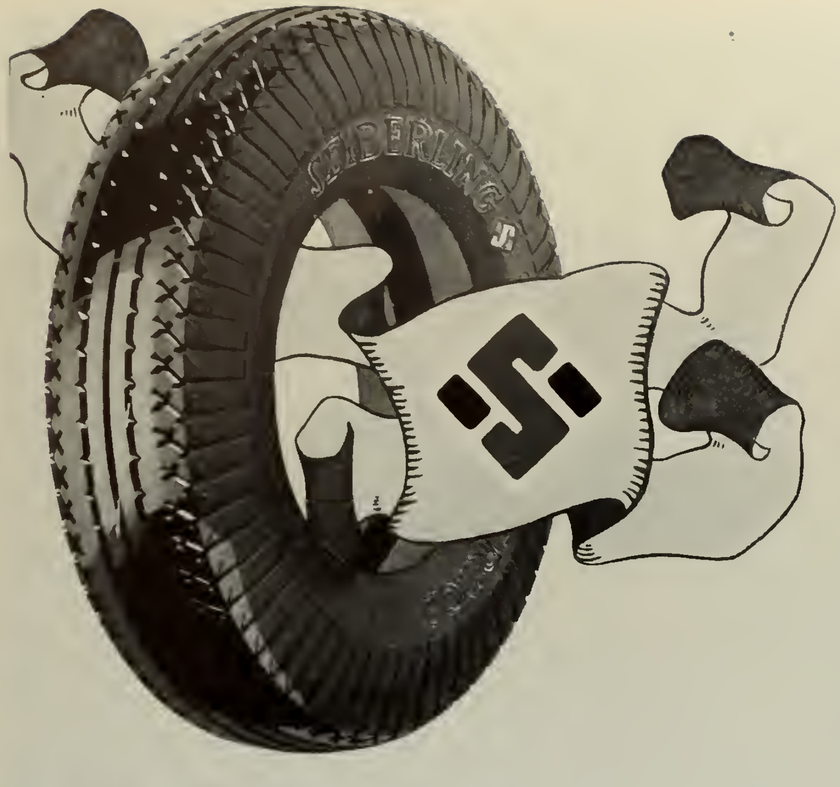
Address..
F



GREAT ALWAYS...
GREATER NOW

For more than 30 years, the Seiberling name has signified unresting improvement, enterprise, invention—and always unchallenged integrity. Now, at the beginning of 1930, the sources of this generation-long renown are reflected more clearly than ever in the latest Seiberling product. . . . No less than six major advances, in manufacturing process, in selected raw materials, and in improved design, signally distinguish the new Seiberling Special Service Balloon Tire. From tread to bead, it is the exclusive quality result of Seiberling experience, progress, and ideals. . . . As such, it is not susceptible of comparison by any other tire standards. There is no like—but only contrast. . . . The Seiberling Rubber Company, Akron, Ohio.

Seiberling

ans. As a *deus ex machina* he was sent from on high to round out the destiny of the Radio Corporation's communications business.

It is quite possible that Woodrow Wilson at Paris, in the spring of 1919, knew of a certain business man, then in his middle thirties, a man born at St. Thomas in the Danish West Indies. Certainly the war President should have seen the young man's name, for, during the war, he had affixed his signature to the commission of Lieutenant Colonel Sosthenes Behn.

What President Wilson could not foresee was the day that Lieutenant Colonel Behn, tall, dark, slender,—already successfully operating the telephone systems of Cuba and Porto Rico—was to walk into the anonymous building at 23 Wall Street. Where Lieutenant Colonel Behn walked in, he also walked out, but with him in his departure was the financial backing of J. P. Morgan & Co. So was born—a year after the Radio Corporation—the International Telephone & Telegraph Corp.

Woodrow Wilson did not live long enough to recognize, even in afterthought, the bearing of that event on his radio-communication brain child. For a number of years I. T. & T. pursued a course that seemed destined to establish it as a sort of duplicate of the American Telephone & Telegraph Co., but in the foreign field. I. T. & T. collected telephone systems in Cuba, Porto Rico, Spain, Mexico, Chile, Argentina, Uruguay and Brazil. It bought the foreign branch of the Western Electric Co. and became a great telephone equipment maker on every continent except North America.

But ten years brought changes in I. T. & T. only less great than the changes in the Radio Corporation. In 1927 I. T. & T. acquired the All America Cables, Inc., connecting New York with the West Indies and the west coast of South and Central America. A year later it acquired for $60,000,000 the Mackay system (Postal Telegraph & Cable Corp.) and Clarence Mackay began to refer to Colonel Behn as "boss". Both of these cable systems have radio interests and are enlarging them. I. T. & T. became, in short, another American radio communication system with stations not only in several parts of South America but in the United States.

So the stage was set for the final scene of the act, again in Paris. It was as momentous if not quite so stirring an occasion as that of 1919; the powers of the world of business were assembled to complete the liquidation of the war. At the head of the table sat the former vice-president of the General Electric Company, the man who in 1919 decided that President Wilson's request could be heeded, a great American radio company formed. Another figure at the table was that of Thomas W. Lamont, member of the Morgan partnership, supporters of I. T. & T. And around the table rushed busy David Sarnoff, an unofficial shadow, doing no small share of the labor there performed.

On the field of negotiation David Sarnoff had won the confidence of Dr. Hjalmar Schacht, the chief German representative. At the crucial point in the negotiations, Sarnoff and Schacht spent a whole night, dinnerless, from dusk to dawn, in earnest conference. On the following day virtual agreement on the Young plan of reparations was announced.

But that was not all which came of that reunion of the nations. In the days when Young, Lamont and Sarnoff were gathered at or near the conference table, somehow the news sped forth from Paris that the Radio Corporation had agreed, "if and when the laws of the United States permit," to sell its radio communications interest to Lieutenant Colonel Behn's International Telephone & Telegraph Corp.

There is in the United States a law forbidding the merger of radio and cable companies. It was passed to insure competition between the undersea cables and the air, forgetful of the enormous duplication of equipment this entailed. Unless and until this law is modified, it will be impossible for the Radio Corporation to sell its radio communications to I. T. & T.; the consideration of the sale, stock worth about $100,000,000 at current market prices, remains a figure of speech. Congress is preparing another radio law but what will be its bearing on this proposal is still undetermined.

No more is needed to round out the act, to set the final scene beside the first as a perfect illustration of the adage about mice and men. A decade of rapid electrical development has brought wholly unanticipated changes in the character of the Radio Corporation. In the same period, another situation in the field of world communications has been created which bears an ironic resemblance to the one President Wilson mused upon in the Hall of Mirrors. And again, it is Owen Young who attempts to save the situation.

In 1919 the threat of British domination of the air, through

[*Continued on page 140*]

"You can't have fortune . . and ignore me"

"I'm the destroyer of fortune wherever I get my hands on it. You've probably done a good deal to block me, but wherever I break through I don't stop with the mere destruction of your property. I cripple business for months—even years—because when I strike business property, I strike deeper than the surface. I stop business income by destroying its source. I am more than Fire—more than Destruction. I am Business Paralysis."

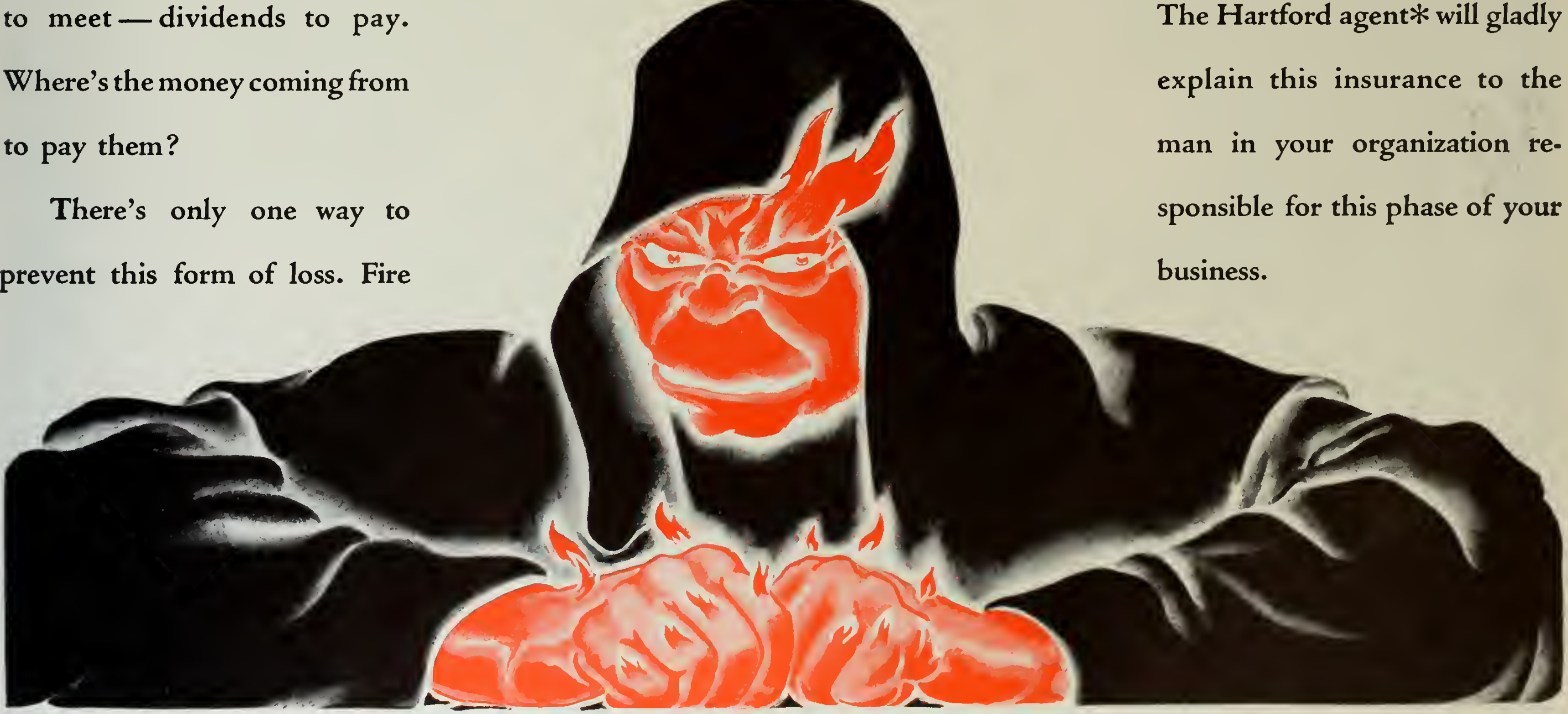
That is Fire's message to property owners.

Business property burns—and fire insurance assumes the burden of its replacement. That is the accepted idea of all that happens when Fire breaks through your defences.

But what is going to happen to the intangible business structure while the material property is being replaced? What of unfilled orders, profits, expected business income from operations? There are contract salaries to pay—fixed expenses to meet—dividends to pay. Where's the money coming from to pay them?

There's only one way to prevent this form of loss. Fire insurance can be made to pay the loss on the property and in addition help fill the gap of idle months after fire. The Hartford agent has a complete plan of business insurance that provides the normal expected income of a business that has had its operations stopped by fire . . . during the period of its idleness.

Whatever your safeguard against Fire, it should include this farsighted, intelligent provision against Fire's paralyzing effect on business operations. The Hartford agent* will gladly explain this insurance to the man in your organization responsible for this phase of your business.



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WRITE PRACTICALLY EVERY FORM OF INSURANCE EXCEPT LIFE

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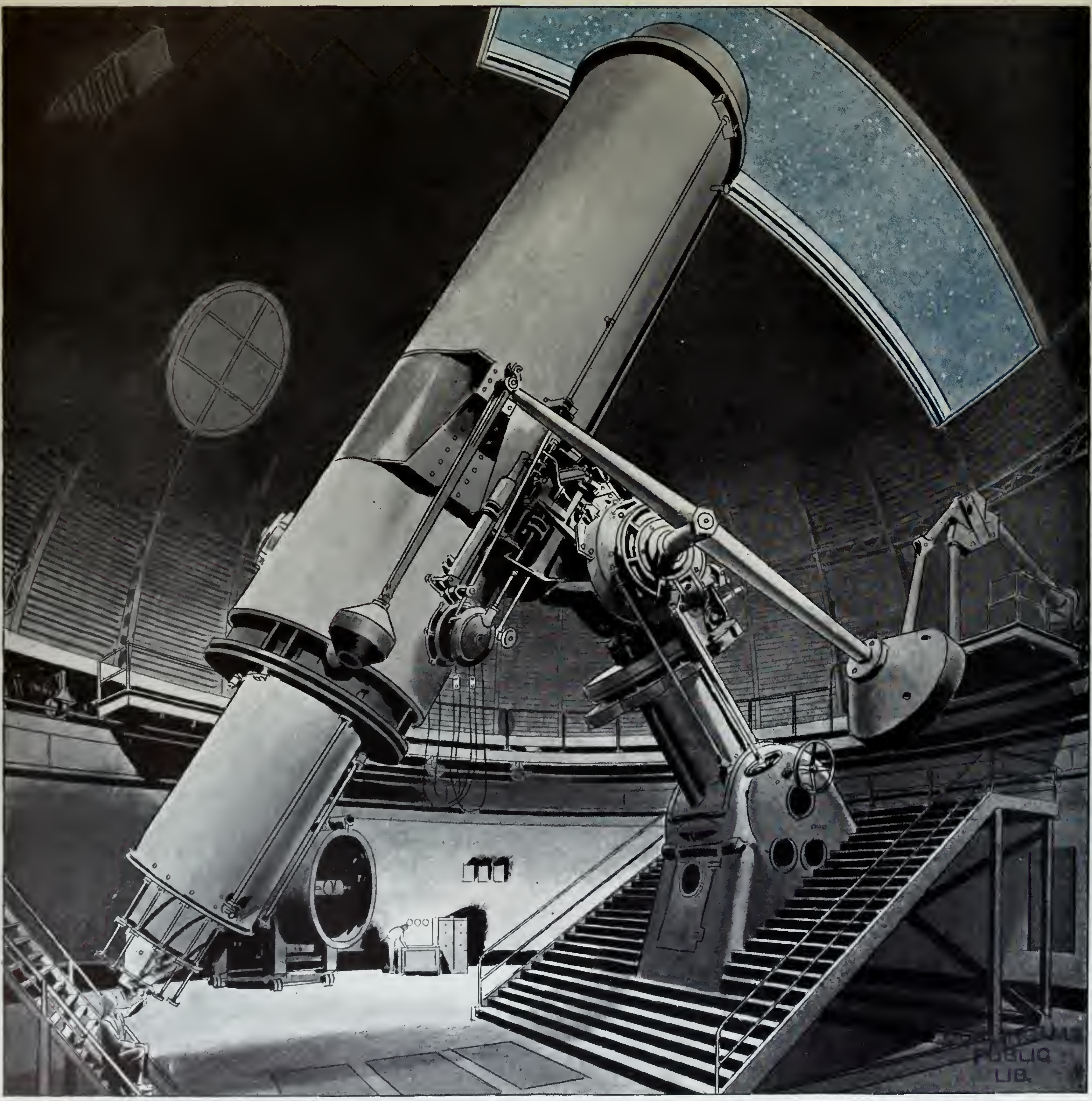
THE EMANCIPATION OF THE AMERICAN BUSINESS MAN

VISION



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THE EMANCIPATION OF THE AMERICAN BUSINESS MAN

. . . the range-finder of business success

The astronomical telescope lengthened man's vision so tremendously that it changed his conception of the universe . . . *the astronomical telescope is a machine.*

The microscope gave such a startling view into the microbe's world that it radically altered the entire practice of medicine . . . *the microscope is a machine.*

The X-ray penetrated regions that no human eye had ever glimpsed, and it profoundly affected every principle of diagnosis . . . *the X-ray is a machine.*

Today, the modern business executive can get, for the first time, a completely new insight into his own business. He is exploring its depths. Plumbing its empty spaces. Forestalling its failures. And charting its successes with the enormously enlarged and sharpened vision that comes to him from . . . *machines.*

Machines as ingenious as any at the disposal of the scientist. Machines as accurate, as specialized, as *intelligent* as the apparatus of a research laboratory. Machines that really give a man the priceless quality known as "Business Vision." That free his mind from destructive guessing. That place before him, every day, the open-faced and unmistakable facts that give him CONTROL.

Every business man hates the fogs of indecision. He wants to side-step the hang-nail details. He wants to avoid the night-long worry that comes from turning up half-truths and near-facts.

Now—with the most practical office systems, records and appliances gathered into one line, every problem in business control can be settled by Remington Rand. Never before has there been such a concentration of specialized ability. Never before has it been possible to give absolutely unbiased advice and service. Never before has it been possible to coordinate business methods and machines into a smooth, orderly routine.

Big business or small business . . .
Call on Remington Rand

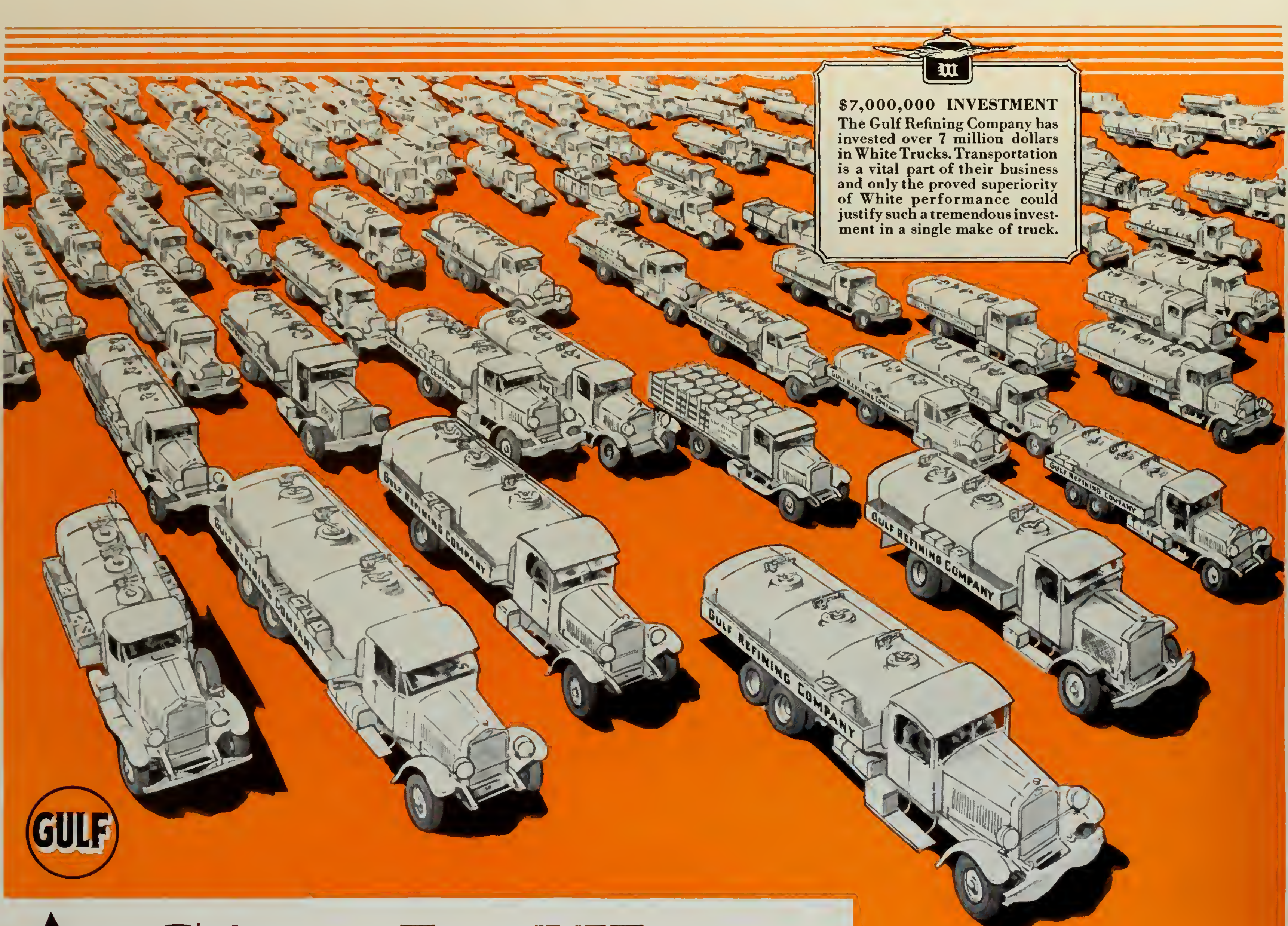
An expert will come to see you. And his own special knowledge is backed by 4,000 other experts in other branches. If he hasn't the answer, *they have.* None of them favor any one method or machine, since all types are theirs to recommend. Their interest centers in your needs.

Remington Rand

BUSINESS SERVICE

REMINGTON *Typewriters and Accounting Machines* . . . LIBRARY BUREAU *Filing Systems and Indexing Service* . . . RAND & KARDEX *Visible Records* . . . SAFE-CABINET *Record Protection Devices* . . . INDEX VISIBLE . . . POWERS *Accounting Machines* . . . DALTON *Adding & Bookkeeping Machines* . . . KALAMAZOO & BAKER-VAWTER *Loose Leaf Equipment* . . . *Executive offices, Buffalo, New York. Sales offices in all leading cities.*

THE GREAT EMANCIPATORS



$7,000,000 INVESTMENT The Gulf Refining Company has invested over 7 million dollars in White Trucks. Transportation is a vital part of their business and only the proved superiority of White performance could justify such a tremendous investment in a single make of truck.

A Single Fleet of 2221 WHITES hauls over 700 million gallons of gasoline a year

Here, in facts and figures, is the story of an accomplishment without parallel in motor transportation. The story of the largest standardized fleet of trucks in the world. The figures are amazing—the facts challenge comparison.

Back in 1911 the Gulf Refining Company purchased its first White Truck. Careful records were kept on that first White—costs were recorded and performance was checked and rechecked. On strictly unbiased tests of performance new Whites have been added each year, until today there are 2221 White Trucks in this single fleet.

With this great fleet of Whites, Gulf hauls over 700 million gallons of gasoline a year—enough gasoline to supply every automobile in the United States with over 30 gallons each. This tremendous gallonage is hauled at an unprecedented low cost per gallon. Besides gasoline the fleet hauls over 107,000 tons of bulk tonnage in oils and greases. More than 24 million truck miles are rolled up annually—

a distance equal to 960 times around the world.

In this fleet there are 416 Whites that have run over 100,000 miles each and many are covering their daily routes with 12 to 14 years of service to their credit. No higher tribute to the dependability of White Trucks could be found than the fact that Gulf has never discarded a White because it has worn out and has never used any other make of truck since 1911.

The distributing of gasoline and oil by the Gulf Refining Company is on a gigantic scale. Gulf operates in 23 states—serving thousands of stations along the Atlantic seaboard from Maine to Florida and the Gulf Coast as far west as Texas. Such widespread operation demands the highest efficiency and economy in hauling. These Whites must keep rolling day in and day out without regard for road or weather.

To accomplish this, supervision of the entire fleet is conducted from headquarters in Pittsburgh. Every item of operating and maintenance cost is accurately recorded, together with the history of each truck, its physical make-up and its performance. There is no sentiment, no leniency in the tabulations. Each truck is judged on the basis of the cold facts. The fleet is always kept up to the highest point of efficiency both from the standpoint of appearance and operation. Even repainting is a part of scheduled attention.

The economy and efficiency of standardizing on quality transportation is expressed in the statement of Mr. E. H. Grey, General Superintendent of Motor Equipment, Gulf Refining Co.:

"White Trucks have made a wonderful record in the service of the Gulf Refining Company. Their stability and durability is shown by the fact that all the Whites in our big fleet are still in service. During the last dozen years a number have been lost in accidents, but our pioneer trucks are still on duty. By standardizing on Whites we have lowered operating costs and increased efficiency and our records show that we do not get an increasing maintenance cost with quality units. Our 10-year-old Whites cost no more to operate than new ones added to the fleet."

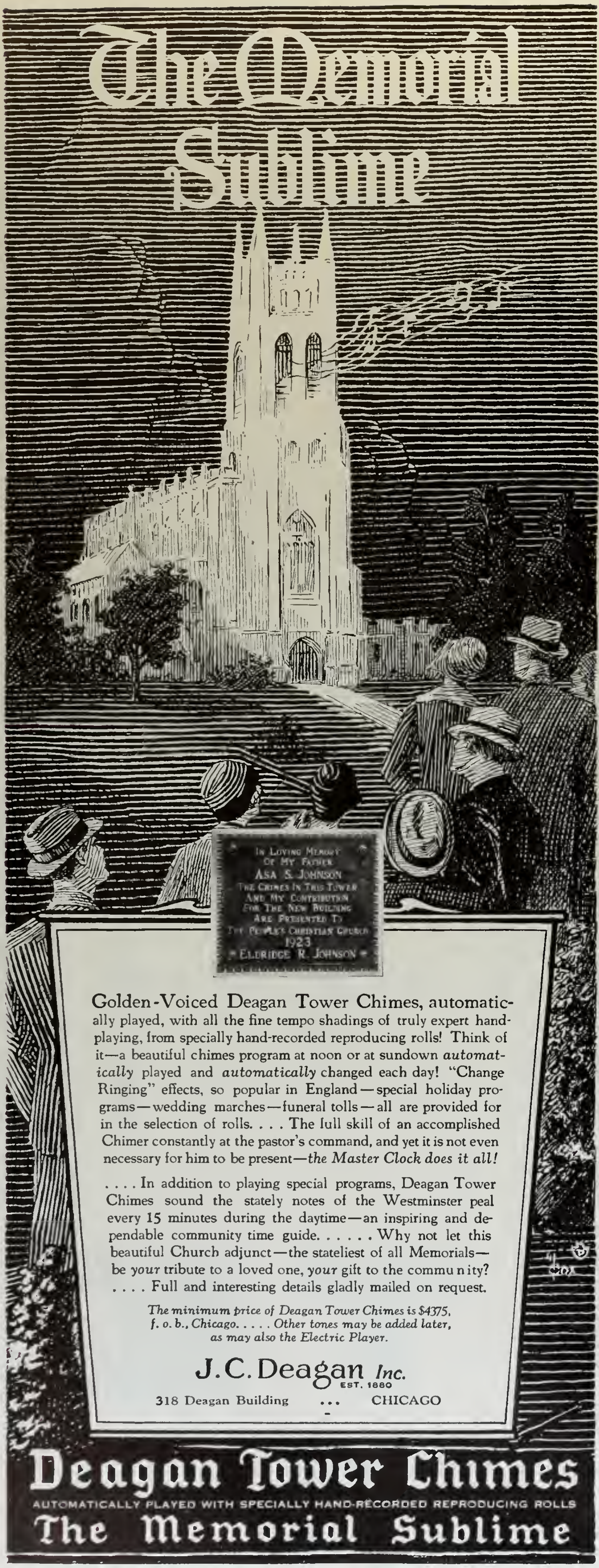
The same kind of remarkable service that has made the great Gulf fleet of Whites famous is true of all White Trucks throughout the oil industry. More White Trucks are in the service of the oil industry than trucks of any other make. There is a logical reason for White leadership—a leadership built on the solid foundation of outstanding performance in every field of business, in every kind of transportation service. The fact that 1311 of the country's foremost owners operate 46,511 Whites in fleets of ten or more is convincing evidence that White gives you more for your transportation dollar whether you buy one truck or a fleet.

THE WHITE COMPANY, CLEVELAND

WHITE

A COMPLETE LINE OF FOUR AND SIX CYLINDER

TRUCKS
BUSSES



Golden-Voiced Deagan Tower Chimes, automatically played, with all the fine tempo shadings of truly expert hand-playing, from specially hand-recorded reproducing rolls! Think of it—a beautiful chimes program at noon or at sundown *automatically* played and *automatically* changed each day! "Change Ringing" effects, so popular in England—special holiday programs—wedding marches—funeral tolls—all are provided for in the selection of rolls. . . . The full skill of an accomplished Chimer constantly at the pastor's command, and yet it is not even necessary for him to be present—*the Master Clock does it all!*

. . . . In addition to playing special programs, Deagan Tower Chimes sound the stately notes of the Westminster peal every 15 minutes during the daytime—an inspiring and dependable community time guide. . . . . . Why not let this beautiful Church adjunct—the stateliest of all Memorials—be *your* tribute to a loved one, *your* gift to the community? . . . . Full and interesting details gladly mailed on request.

The minimum price of Deagan Tower Chimes is $4375, f. o. b., Chicago. . . . . Other tones may be added later, as may also the Electric Player.

J. C. Deagan *Inc.*
EST. 1880
318 Deagan Building ... CHICAGO

Deagan Tower Chimes
AUTOMATICALLY PLAYED WITH SPECIALLY HAND-RECORDED REPRODUCING ROLLS
The Memorial Sublime

Banking—Group and Branch

(*Continued from page 65*)

public, in short, is well pleased.

Here in the Northwest the mysteries of group banking were most perfectly unfolded. And here perhaps there was best reason for it, because here the record of independent bank failures had been worse (due to condition of agriculture) than in the U.S. as a whole. But the idea spread last year with incredible swiftness so that November calculation indicated that there are now 273 chains and groups owning 1,858 banks with about 20% of the total banking resources of the U.S.

Bank Mergers

But we are not yet ready to analyze the fundamentals in the trends of Branch and/or Group Banking. First we must note the enormous increase in the size of individual banks. Over a period the Chase National became the second biggest National bank (in volume of net deposits) without any mergers. But last year, it would have fallen to a much lower place had it not absorbed a hundred million dollar bank. Other banks were merging at an almost breathless rate. By merger, the National City not only kept its place as biggest U.S. bank but jumped from a billion dollar to a two-billion dollar bank. From a two-billion dollar bank, National City next prepared to soar to the title, "world's biggest bank". But acquisition of the Corn Exchange was halted by the October Panic which forced Corn Exchange stock below the price at which National City had offered to purchase it in the terms which Mr. Mitchell had arranged just before his September departure to Europe.

The explanations of this new U.S. breed of giants are various, but, in the main, are closely related to all phases of the present banking question. Motivation is often believed to be nothing more than the personal ambition of bankers. The public, regardless of the inextricable truth, loves a tale so motivated. The Chicago press screeched with delight when the Continental Illinois, resulting from the merger of the two big Chicago banks whose personal traditions were most noticeably divergent, became "the world's biggest bank under one roof". As a result of the consolidation, the Messrs. Reynolds, who had come to Chicago from Iowa, were hailed as "biggest bankers outside New York". And an insurance man, Donald R. McLennan (whose son was Yale's star in last fall's Princeton game), and Charles Glore of Field, Glore & Co. were given front-row seats among Chicago financiers by reason of their influence in the merger. In Atlanta, when the Atlanta & Lowry-Fourth National consolidation was effected, the new bank was promptly proclaimed as "biggest bank in 13 Southern States," bringing new prestige to John K. Ottley and T. K. Glenn. It was no fun for the Treasurer of the Republican Party, Joseph R. Nutt, to learn that his Union Trust Company of Cleveland ceased to be "biggest bank between Chicago and New York" when the Guardian Detroit group and the Union-Commerce Corp. merged to form the half-billion-dollar Guardian Detroit Union group, headed by Mr. Robert Owen Lord. Other banks have become "biggest in Missouri outside of St. Louis", "biggest in Colusa County, Calif.", etc., etc.

Akin to ambition is greed. Occasionally mergers result because a sharp promoter's eye sees a chance for huge and easy profit in the transaction. This is rare—much rarer than in the case of group-formation—because banking is sufficiently regulated and the publicity given to such transactions is sufficiently great to prevent the usual dodges of the promoter. The economist who would ignore the factors of ambition or greed would be a very stupid economist; but it is a wise economist who seeks yet more compelling causes for so gigantic results.

The basal cause of bank-mergers is desire to establish an organization that has the elements not only of greater profits but more especially of permanent, steady profits. Veterans like the Irving Trust Co., which is a record holder for working out big mergers successfully, acquire a technique for organization with just this purpose in mind.

Experience to date (but not adequately covering the hugest mergers) shows that the bigger the bank, the greater, generally, is its rate of profit over a period of years, caused more by greater stability than by a sudden increase. In the typical state of Illinois, banks with earning assets (closely agreeing with deposits) under two million dollars showed 5.2% earned on invested

A Portrait that Speaks for Itself

WHO would call himself a connoisseur who must look for the master's signature on any canvas? Who would term himself an epicure who needs more than a taste to divine the recipe?

Surely, you regard yourself as a man of judgment and discrimination. True . . . you may ride in blissful ignorance of the maker of your tires, you do know quality, even in tires, when you see it. No connoisseur of casings, perhaps . . . you nevertheless can judge a value! If this be true, look upon the portrait just above. Look closely . . . and answer one question . . .

Is it any wonder, in view of what you see, that discriminating car owners are quite content to dismiss their tire problems by saying, quite firmly, "Silvertowns de Luxe, please," when new tires are needed? The B. F. Goodrich Rubber Company, Est. 1870, Akron, O. Pacific Goodrich Rubber Co., Los Angeles, Cal. In Canada: Canadian Goodrich Co., Kitchener, Ontario.

Goodrich Silvertowns de Luxe

capital as opposed to 8.6% earnings for those in the two-to-ten million class and 11.8% for those above ten million. Certainly 5% is much too little for a bank to earn, especially since a surplus must be built up before dividends are paid. Even 12% is little enough and the presumption is that a ten-million-dollar bank (which is certainly not a large bank) might do well to hook into a three- or four-hundred-million-dollar bank which may earn from 12% to 20% on its invested capital. (George F. Baker's bank, together with its securities company, actually pays out 100% in dividends on its relatively small capitalization, but this is unique, and even in this case as in nearly every other a bank puts more money into surplus and increased capital than into stockholders' pockets.) Many are the reasons why a bank's rate of profit increases with size. These we may summarize:

A Note on Andrew Price

Twenty-five years ago is exceedingly long ago in the State of Washington. Then it was that a grammar school boy who had been getting his schoolmates to start savings accounts wrote to his uncle: "My dear Uncle Andrew . . . if you come out here we will go into the banking business together. I think it would be very profitable . . .

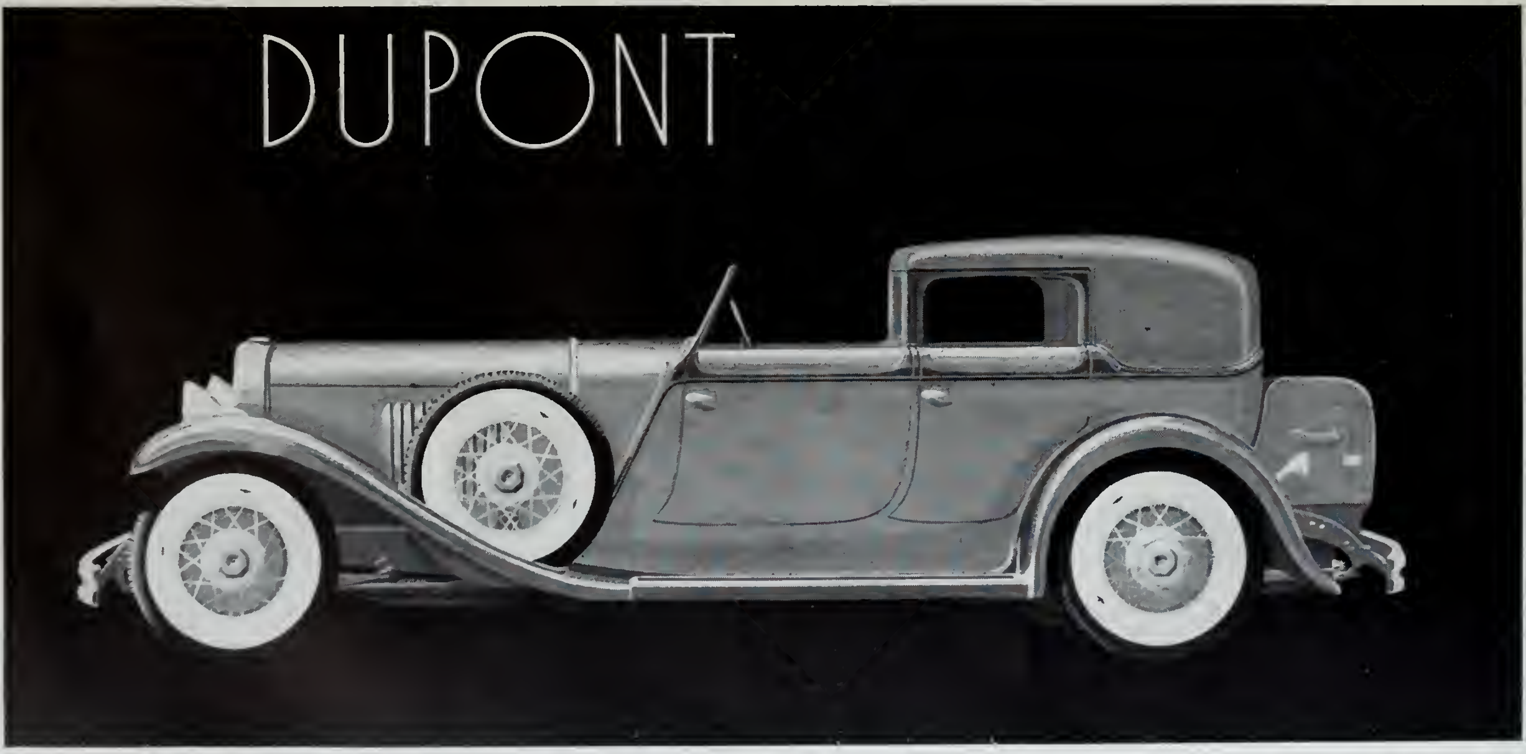
(signed) Andrew Price
Solicitor of Accounts"

By 1926 Andrew Price was the *enfant terrible* of Seattle banking. Already making money from the Marine National and Marine State banks, he suddenly opened the Marine Central Bank on the outskirts of the town, shocked the wiseacres by bringing in the greatest opening day deposits ever recorded in Seattle. He was soon the most active banker in the State, controlling large "downtown banks" and several in other towns. It was the triumph of the "Bancorporation", a word he coined in 1927 when he formed the Marine Bancorporation, to own all his banks.

Conservatives began to capitulate to his side when they heard that C. J. Lord of Olympia, sonless dean of Washington bankers, had sold his bank to the Bancorporation, had himself become affiliated with it. Later even Seattle's rich National Bank of Commerce, which did its first business over rough boards, joined. Although in Seattle the Bancorporation must compete with the new and mighty First Dexter Horton group, by December 1, 1929, it included 10 banks, had combined resources of $54,000,000—a far more powerful financial institution than the Pacific Northwest dreamed of a decade ago.

1. *Satisfaction to All Customers.* Up to an unspecified limit, the bigger the bank the better it can obtain for its customers: bonds and stocks, information about the other fellow's credit, statistics, tickets to Timbuctoo, boxes, management of his wealth when he is dead and food for his vanity when, still alive, he walks beneath painted ceilings in a beauteous building that is "my bank". This is especially true when different kinds of banks merge—e.g., a commercial bank absorbing a trust company, and then possibly organizing an allied security vending company. (It should also be noted that the Federal Law *does* permit National banks possessing a capital and surplus of one million dollars or more to have branches in Foreign Countries. With the growth of Foreign Trade this tends to attract customers and the privilege has been widely used.)

2. *Satisfaction to Customers Who Borrow.* Because it sounds so simple, the most common justification for bigger banks is to "keep in step with bigger business—billion-dollar corporations must have billion-dollar banks". A bank, of course, cannot lend more than 10% of its capital surplus and undivided profits (except with securities or commodities as collateral) to any one concern. U.S. Rubber Co. with



Du Pont Town Car · · Straight Eight Motor · · 140 Horse Power . . Individual Coachwork

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DUPONT

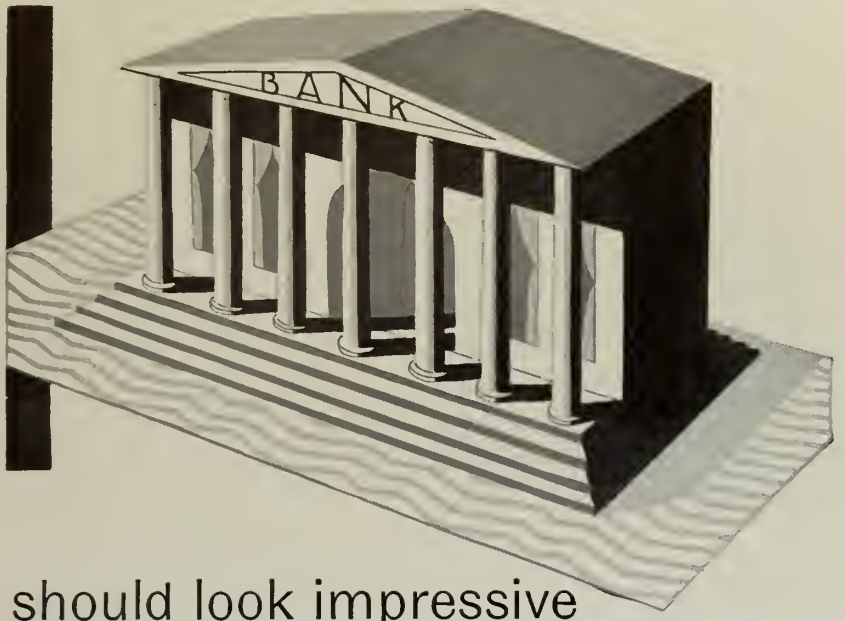
IN THE HOLLOW OF HER HAND

. . . . SHE is 16; she is 30; she is 65. She sells eggs in the country, notions in a department store, bonds on Wall Street. She is a graduate of the fourth grade, high school, or occasionally Smith. She wears $15 frocks, home-sewn dresses, Chanel gowns. She is a drudge, a hoyden, a help-mate, a lady; she is the aggregate American woman . . . and, in her various ways, she is the spender of the nation. Deciding how the bulk of her family's money shall be divided, she controls the profits of many manufacturers. Extravagant, frugal; wise, foolish; fickle, dependable; she holds *your* business, in all likelihood, in the hollow of her hand . . . . The successful advertising of many of our clients talks a woman's language: color in kitchens and bathrooms for Crane Plumbing; interior decoration for Karpen Furniture; smartness for Marshall Field and Company, Retail; home movies for Filmo Cameras; bright attractive jackets for Capitol Boilers; and even Wilson Brothers advertising, directed to men, has invariably invited women, who buy 65% of men's haberdashery, to read between the lines.

CHARLES DANIEL FREY COMPANY * GENERAL ADVERTISING AGENCY

333 North Michigan Avenue, Chicago . . . . . Magazine, Newspaper, Outdoor, Radio, Direct Mail.

If the name of your bank is important enough to add prestige to your checks . . . your checks



should look impressive enough to suggest the prestige of your bank

You will find a particularly strong personal satisfaction in signing checks made on La Monte National Safety Paper. No one can mistake their decided atmosphere of distinction and authority.

La Monte Safety Paper conveys a definite impression of your own good taste—and it establishes your position as a customer of one of the nation's more progressive banks. Rich, dignified, handsome, this outstanding check paper is the choice of more than 60% of the great banks in America. George La Monte & Son, 61 Broadway, New York.

The wavy lines instantly identify La Monte National Safety Paper—the **standard** *in* **checkpapers.**

LA MONTE
NATIONAL SAFETY PAPER
FOR CHECKS

1928 gross sales of $193,000,000 might at any time wish to borrow as much as $15,000,000 unsecured. A bank's capital funds would have to be in excess of $150,000,000 to accommodate this borrower, and such a bank would probably be a "billion-dollar bank"; i.e., total resources exceeding a thousand million. All this is true, *but*, as we shall see later, there is no pragmatic compulsion about this argument for two reasons: a) the number of corporations who borrow over a million from banks in preference to other forms of financing is relatively small in these days of bank acceptances, strong cash positions, stock issues, etc.; b) many corporations prefer scattering their bank accounts widely and have no difficulty borrowing from a number of banks each willing and even competing to lend their "legal limit" to a good borrower.

3. *The Promotional Affiliate.* A habit of banks upon attaining a great size is to organize an investment company as an "affiliate" and some have even proceeded to form investment trusts. The same people who own the bank own the affiliate. The affiliate can make enormous profits out of underwriting stock and bond issues. The affiliate is technically separate from the bank but obviously there is close cooperation. It is a serious question whether the cooperation may sometimes be too close, thus getting the bank into promotional activities of which it should be judge rather than advocate. But certainly affiliates offer great profit possibilities—and therefore a reason for banks big enough to create them.

4. *Operating Profit.* Large scale operation provides an opportunity to make the cost of each function less. Also, large banks can pay for better executives who, presumably, are efficient, profit-creating.

But not only may a bank see bigger profits in merging; it may, alas, see decreasing profits if it does not merge, for competition in banking is as fierce as it is funny. It is funny because all that the Rotarian claims for Service is literally true in the case of banks. Normally there is little publicly proclaimed competition as to the price of money—nor is one bank fond of making a loan which a rival bank would refuse; so in Service, banks must exhibit all their rivalry.

Now of all the services and satis-

[*Continued on page 165*]

Radio Corp. of America

(*Continued from page 130*)

acquisition of the Alexanderson alternator, led directly to the formation of the Radio Corporation. In 1929 the same threat in a new form prompted the Radio Corporation to offer for sale its birthright, as the surest way to meet the threat.

In 1928 the British dominions gathered at an Imperial Conference on Communications at London. Wilson was long forgotten, as the tide of nationalism ran high. The economic and military importance of knitting the Empire more closely together than ever before by cable and radio was iterated and reiterated. Fear of America in the field of international communications produced the very thing America feared—gigantic British consolidation of cable and radio facilities.

Cables & Wireless, Ltd. came into being a year later under the guidance of Lord Inverforth. Beginning life as Andrew Weir, Lord Inverforth won his wealth and his title from the sea. Senior partner of the Glasgow shipowning Andrew Weir & Co., he is now chairman of the boards of twelve large enterprises, ranging from air brakes to oil. Of the twelve, Cables & Wireless, Ltd., is by far the most important. Fused into the greatest operating group of international communications in the world were The Eastern and Associated Companies (Europe, Asia, Africa, Australia, and South America), the British Marconi and its subsidiaries on land and sea, the Government's "All Red Route" cable system across the Atlantic, Canada and the Pacific to the Far East, and the Government's "Imperial Chain" of beam wireless stations throughout the world. This merger was more than a unification of operating companies; it was also a huge investment company fortified with immense capital. By it Britain purposed to regain control of world communications.

Because of its expanding export business, because of the growing empire of the dollar, America was more than alarmed by the for-

[*Continued on page 142*]

CHRISTENSON

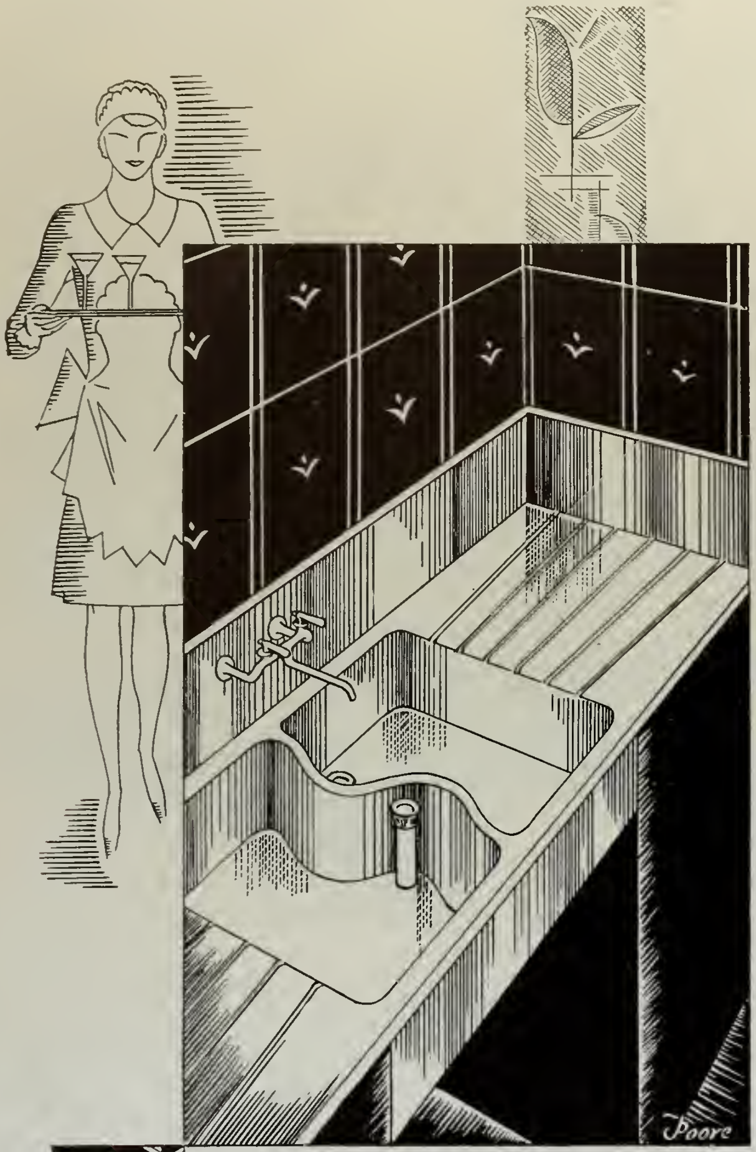
PROGRESS

Prairie schooner to airplane—magically has American Business advanced to swifter and more economical methods. Production, sales, and lately distribution have in turn come under the dispassionate eye of the engineer • • • General Box Engineers early discovered the shipping room as an unworked vein of profitable savings. Today a shipping case must be especially designed for the particular job it has to do—it must represent the best available thought on design and construction so that it will deliver its contents in good order at the LOWEST POSSIBLE TOTAL COST • • • This sort of experienced, unbiased thought General Box Engineers will supply for the asking. They have helped hundreds of firms in various lines lower shipping costs—among them, some of the largest manufacturing firms in the country • • • They will also furnish the facilities of two box laboratories—one in the East and one in the Middle West—to assist in applying correct principles to your specific shipping problem. We solicit correspondence on the subject.

GENERAL BOX COMPANY

44 WEST ILLINOIS STREET • CHICAGO ILLINOIS

One Service
Nation Wide



THE imagination of the artist and the engineer's sense of utility meet in the new Butler's Pantry Sinks by Elkay. The gleaming surfaces of copper, white metal, nickel, crodon plate or monel metal are as beautiful as they are practical, and in a day when adequate entertainment demands impeccable service, such a fixture is indispensible. . . . . A letter will bring you detailed information.

ELKAY

4707-4717 Arthington Street
Chicago

mation of Cables & Wireless, Ltd. The patriotic arguments of 1919 for a strong American communications company were repeated in 1929 with equal force and applicability. Scattered American patents in 1919 crippled competition with the British Marconi Co. Scattered American companies might do the same thing ten years later in competition with Cables & Wireless, Ltd. Three great external communications companies—I. T. & T., Radio and Western Union—were held apart by the Federal law prohibiting mergers of radio and cable.

Not to get rid of a useless appendage to its great amusement enterprise but as a means of bringing about, on a larger scale than he ever dreamed of, the very thing President Wilson had in mind, the Radio Corporation now proposed to sell its communications business. Its officers were still patriots: once they had even contemplated buying from the I. T. & T. the thing that they most needed—an inland feeder system through Postal Telegraph—to complement their wireless service. Now instead they would sell, were it not for the law.

To Washington, then, went Mr. Young and Mr. Sarnoff. Before a Senate committee studying the whole communications field the Radio executives laid down a program of consolidation far more startling than the railroad plan which was at that moment announced. Not only should I.T.&T. buy Radio's communications business, but into the consolidation should be drawn the vast cable system of Western Union. Next might come the union of the great domestic telegraph systems whose duplicate services Mr. Young abruptly termed "expensive and archaic". Finally he visioned one unified communications service, whose energies and profits should be devoted not to competition but to research, whose power should be second to no other such group in the world.

Thus opened another act of the international drama which began to unfold its plot at Versailles. Many of the original actors are still in the cast: Behn and Alexanderson, Sarnoff, Young . . . None of these gentlemen, one hazards, would venture to forecast the end of the act, let alone the conclusion of this curious drama . . .

But one character the 1929 scene lacked to complete the cycle of comedy—a strong-willed gentleman who, through glittering glasses perched on a Louis XIV nose, could see the new situation and act upon it.

U. & U.

THE EMPIRE'S INVERFORTH, WHO LINKS SEA AND SKY

International

NEWCOMB CARLTON OF WESTERN UNION

SOSTHENES, CHIEF OF I. T. & T.'S BROTHERS BEHN

Wide World

THE U. S. CONTRIBUTED THOMAS NELSON PERKINS

ALERT IN THE MORNING... AT 3 O'CLOCK—*EYE-WEARY*

Examine your lighting facilities, then write the Edison Lighting Institute, Harrison, N. J., and we shall be glad to send you free bulletins concerning proper illumination in your particular kind of business.

YOU may wonder sometimes why people in your establishment begin to slow down in mid-afternoon. Possibly you notice that they seem restless or weary, or complain about having headache.

Such manifestations are frequently due to faulty lighting, which places your employees under a disadvantage *at your expense.*

Edison MAZDA* Lamps can always be depended upon to give the *full benefit of the current consumed.* It is advisable to use these tested lamps wherever good lighting is important.

*MAZDA—*the mark of a research service*

EDISON MAZDA LAMPS

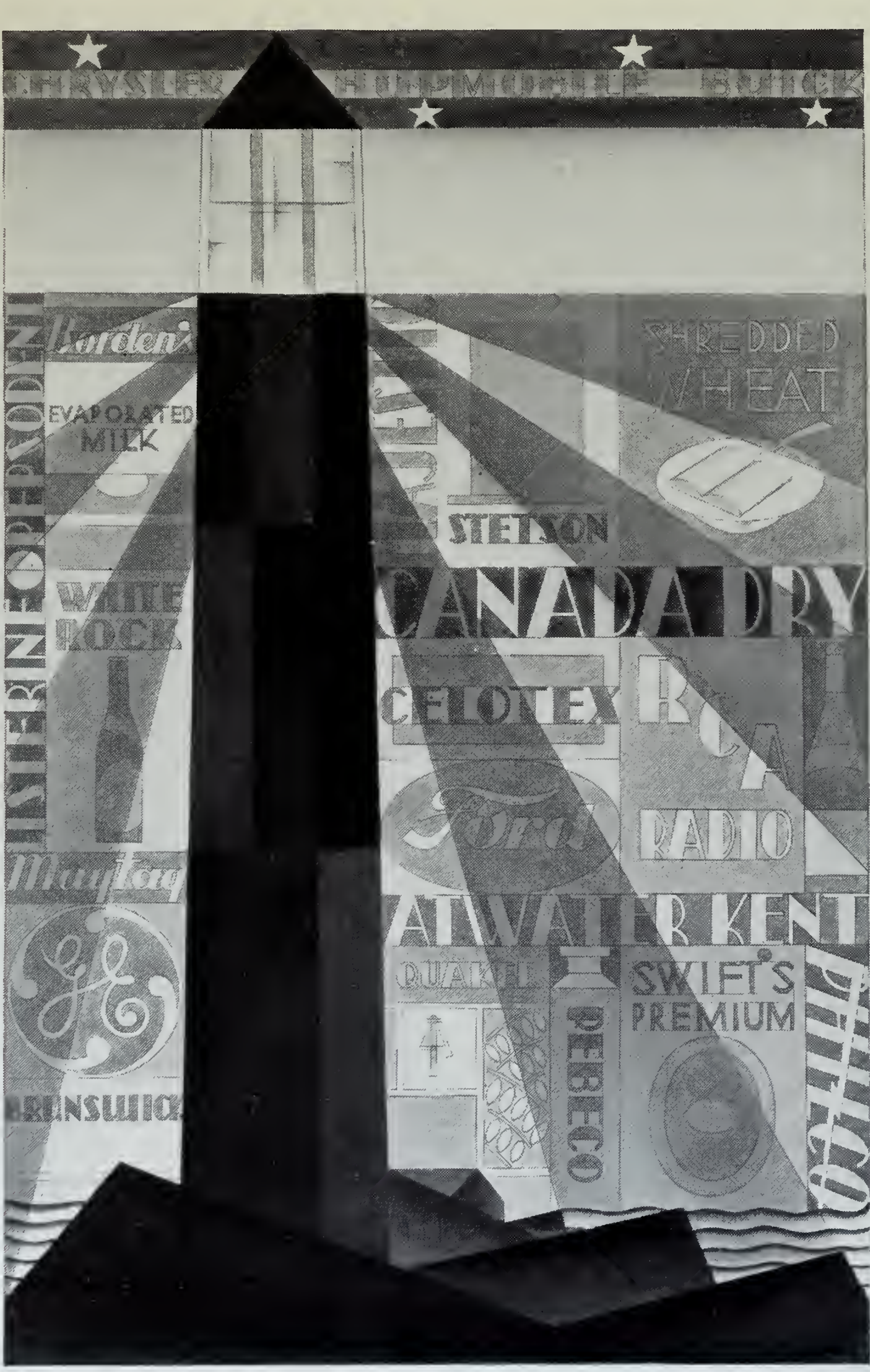
GENERAL ELECTRIC

Advertisers who SELL known quality.. *now can buy it*

A woman never asks a merchant, "Is this Old Dutch Cleanser as good as that I bought last week?" . . . "Is this O-Cedar Polish the same as the down-town stores sell?" . . . "Will this package of Beech-Nut Bacon taste as good as the package I'm using now?"

Hundreds of items of merchandise are so uniform, so carefully kept to established standards, that their quality is unquestioned. No one investigates. No one compares. But when their makers come to advertise, how many newspapers can deliver circulations that match these products in their uniformity of quality? . . . In their nation-wide coverage of quick-action quality markets?

To such national advertisers, Scripps-Howard offers an advantage unique in the newspaper world . . . 25 newspapers, covering 25 buying centers, with a nation-wide uniformity of circulation. For SCRIPPS-HOWARD Newspapers have a common honesty of purpose. They are alike in their unquestioned devotion to the best interests of their communities. They are alike in their freedom from dictation and outside control, in their completeness of resources, in their quick and brilliant coverage of news. Naturally, they are alike in the quality of circulation, automatically selected, which each delivers to the advertiser . . . *Circulations whose values are as known, as uniform, as unvarying as the values in the national advertiser's own package.*



SCRIPPS-HOWARD

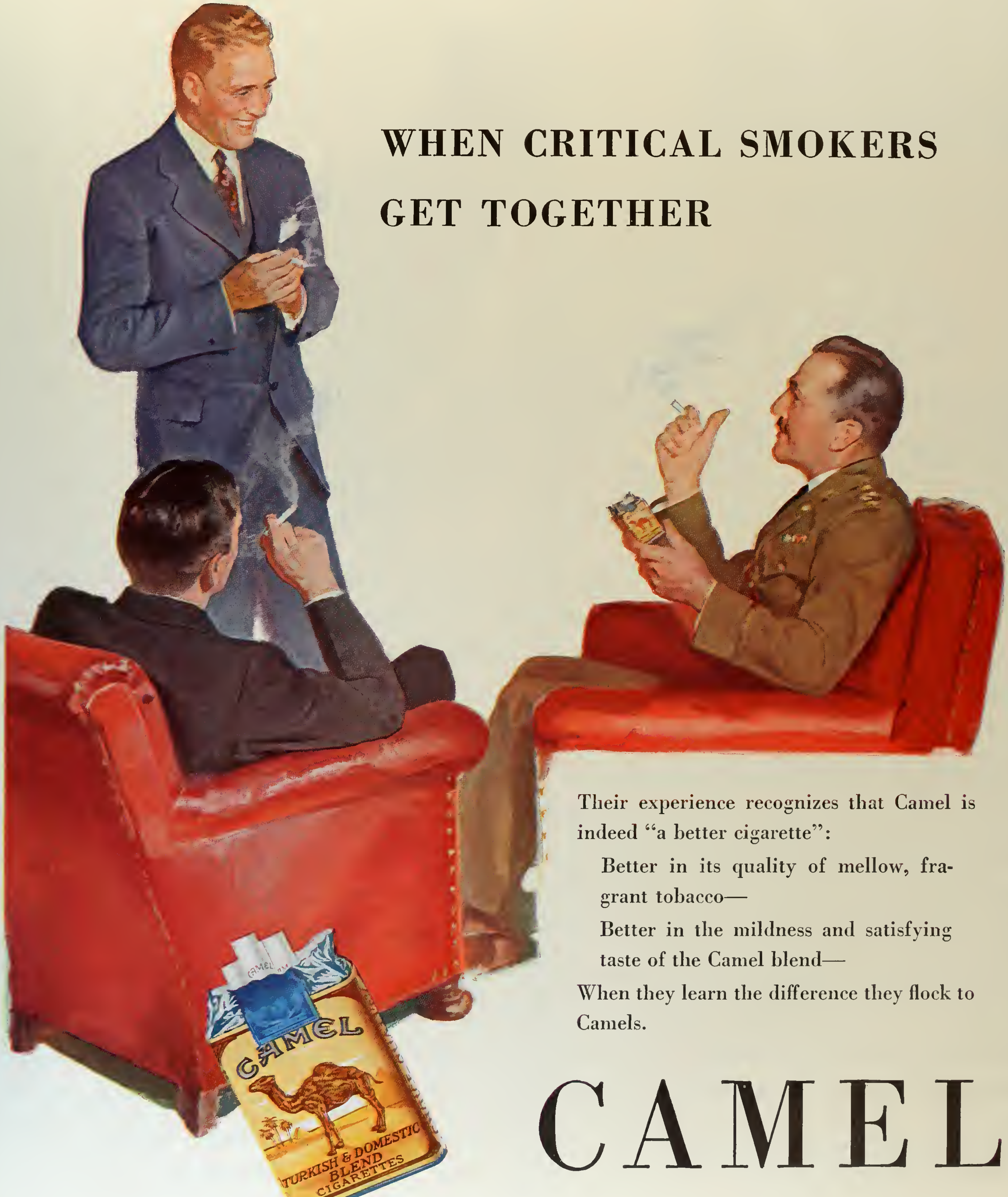
NEW YORK . *Telegram*
CLEVELAND . . *Press*
BALTIMORE . . *Post*
PITTSBURGH . *Press*
SAN FRANCISCO . *News*
WASHINGTON . . *News*
CINCINNATI . . . *Post*
COVINGTON *Kentucky Post*
—Kentucky Edition of Cincinnati Post
BUFFALO . . . *Times*
INDIANAPOLIS . *Times*
DENVER . *Rocky Mt. News*
TOLEDO . . . *News-Bee*
COLUMBUS . . *Citizen*
AKRON . . *Times-Press*
BIRMINGHAM . . *Post*
MEMPHIS *Press-Scimitar*
HOUSTON . . . . *Press*
YOUNGSTOWN *Telegram*
FORT WORTH . . *Press*
OKLAHOMA CITY *News*
KNOXVILLE *News-Sentinel*
EL PASO . . . . . *Post*
SAN DIEGO . . . . *Sun*
EVANSVILLE . . . *Press*
ALBUQUERQUE . . . *New Mexico State Tribune*

SCRIPPS · HOWARD
NEWSPAPERS

MEMBERS OF THE AUDIT BUREAU OF CIRCULATIONS
OF THE UNITED PRESS AND OF MEDIA RECORDS, INC.

NATIONAL ADV. DEPT., *Stuart S. Schuyler*, DIRECTOR, 230 PARK AVE., NEW YORK • CHICAGO • SAN FRANCISCO • DETROIT • LOS ANGELES • ATLANTA • PHILADELPHIA • BUFFALO • DALLAS

WHEN CRITICAL SMOKERS GET TOGETHER


CAMEL
CAMEL
TURKISH & DOMESTIC BLEND CIGARETTES

Their experience recognizes that Camel is indeed "a better cigarette":

Better in its quality of mellow, fragrant tobacco—

Better in the mildness and satisfying taste of the Camel blend—

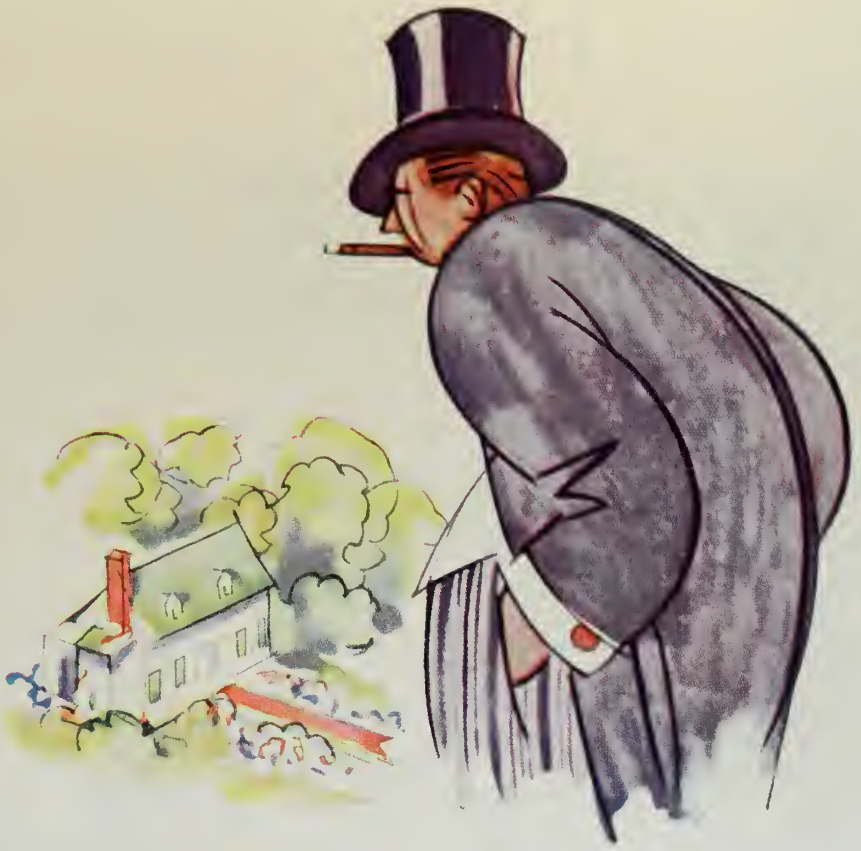
When they learn the difference they flock to Camels.

CAMEL
CIGARETTES

© 1930, R. J. Reynolds Tobacco Company, Winston-Salem, N. C.

BURLINGA
PUBLIC
LIB.

The Garden beckons to Big Business



››››››››››››››››››› Once in the dim dark ages of advertising, a bright publisher conceived the radical idea that women were really interested in clothes. ❧ So he published a fashion magazine. And it grew—and grew—and grew. Just because it met a fundamental need. ❧ Of course advertisers of those days looked askance. Advertise foods in a fashion magazine? How extraordinary! You see it really does take some time for even a very good idea to sink in. ❧ The garden has become the mark of caste—the caste of the men and women who love their homes, who work and spend to improve them. ❧ When Better Homes and Gardens struck its editorial keynote seven years ago, thousands of home-minded families were waiting for just such a magazine. ❧ Both men and women wanted a magazine which would talk to them through their hobby. They wanted a magazine devoted exclusively to "how-to-do-it" articles on garden planning, on home building, on interior decoration, on the cooking which is so important a part of good living. ❧ So Better Homes and Gardens has grown—and grown—and grown. Just because it has met a fundamental need. ❧ Now it reaches a million, three hundred and seventy-five thousand families—97% of whom own their own homes. 77% of these homes are in cities, towns, and suburbs within retail trading areas of cities over 25,000. ❧ For advertisers, Better Homes and Gardens has created an overwhelming opportunity. It has editorially selected and brought together, in unparalleled concentration, the people who are perhaps the most responsive and responsible buyers in the world—owners of prosperous homes, with gardens. ❧ Truly, the garden does beckon to Big Business, just as the fashion magazine once beckoned. ‹‹‹‹‹‹‹‹‹‹‹‹‹‹‹‹‹‹‹

BETTER HOMES AND GARDENS, DES MOINES, IOWA

Island Kingdoms

Continued from page 67

range through the woods. It was not so long ago that the annual deer hunt was a feature of the season on Naushon. Six power boats, two cruising schooners, and a steamer keep up connection with the mainland. A baker's dozen of Forbes families come to their island every summer. Though many guests are entertained on Naushon, it is an unwritten rule that every one of the houses that are strung out along the seven mile stretch of the island is occupied by a member of the family. There is no selling, renting or giving of island property to outsiders.

The Forbes tribe of Boston has no connection with *Forbes Magazine* nor with Forbes & Co. (New York real estate), but practically every other important business figure of that name belongs to the tribe. W. Cameron Forbes, once Governor-General in the Philippines, is referred to as "the governor" by the Forbes families that summer on Naushon. He is a senior partner of J. M. Forbes & Co., long-established mercantile firm of Boston. Other eminent Forbes include: Allan Forbes, President of Boston's State Street Trust Co.; Edward Waldo Forbes, for twenty years the director of the Fogg Art Museum at Harvard; Dr. Alexander Forbes, member of the faculty of Harvard Medical School; J. Grant Forbes, a foreign director of Blair & Co., whose eleven children insure that the line will not die out in this generation.

Dominant among Forbes ancestors is John Murray Forbes. His firm was, and is, notable among Boston mercantile houses; he shared in the founding of the Chicago, Burlington & Quincy Railroad. In 1857 he bought Naushon Island, over which he presided in much the same patriarchal manner as does the present "governor". Ralph Waldo Emerson, a guest at Naushon, wrote of his host: "It is a matter of course that he should shoot well, ride well, sail well, administer railroads well, carve well, keep house well, but he was the best talker of the company. . . . I divided my admiration between the landscape of Naushon and him." This praise rings the more true in view of the fact that Mr. Emerson was extremely seasick on the trip to the island.

The Republic of Middle Brewster

When the late Melvin Ohio Adams, owner of one of the country's shortest and most profitable railroads, the Boston, Revere Beach & Lynn, wanted to reach his middle Brewster Island in Boston Harbor, he set sail in a dory, "The Leviathan". Today his son, Karl Adams, who lately sold the family railroad, can commute between his Tremont Street law office and Middle Brewster, ten miles away, by power boat. He claims his island is in effect a republic: the Federal Government seized it in war days, but released it with the coming of peace; the Commonwealth of Massachusetts collects no taxes, has no jurisdiction on the island. The Adams republic is a great twelve-acre rock bearing on its face enough verdure to give it an emerald complexion. At night the nearby Boston Light, the country's first sea beacon, sweeps great bars of light across the island, sounds a dismal fog signal when it is stormy.

Orchids and Copper

Owned by Harvard University, leased to onetime copper king Albert C. Burrage, for a term of 99 years, Bumkin Island is another of the landmarks of Boston harbor. It too was used by the government in war days—a possibility which every island emperor must anticipate. Up to that time Mr. Burrage maintained on it a hospital for crippled children. Of late his interests have turned towards horticulture; his superb orchids have kept him in the President's chair of the American Orchid Society since 1921. South America's Brazil is the land of orchids, and her Chile is preëminent among copper lands. A score of years ago Mr. Burrage and H. H. Rogers, late great Standard Oilman, foregathered and put through that Amalgamated Copper deal which inspired denunciations of the fieriest nature, among them Thomas Lawson's book on "Frenzied Finance". In 1913 Mr. Burrage organized the Chile Copper Company, a holding company to take over the properties of the Chile Exploration Company, whose mines were the largest known body of copper ore in the world. He interested the Guggenheim brothers, and they invested heavily. Since 1923, when Anaconda purchased a controlling interest in Chile Copper, Mr. Burrage has not been active in business. What he will do with his island is uncertain: perhaps he will

This WACO "225" Straight-Wing won the 1929 National Air Tour with a perfect score for reliability. Send for copies of booklets describing the ship and the Tour. Let us arrange a flight at your convenience . . . and for your satisfaction.

AND AGAIN IN 1929

IN 1928, WACO won the National Air Tour by a wide margin of points. And in 1929 it eclipsed its brilliant performance of the year before . . . winning still more decisively . . . *proving* its ability to do five things better than *any other ship*.

The official figures speak for themselves. The winning WACO in 1929 carried the full Dept. of Commerce type certificate useful load of 972 pounds over the scheduled route of 5,017 miles at an average speed of 130.8 m.p.h. It landed and stopped in 3-4/10 seconds . . . took off in 4-4/10 seconds . . . *less than 100 feet!* And it did all these things with a 225 h.p. Wright "Whirlwind" motor.

These figures are typical of everyday WACO performance . . . performance that has made WACO the most popular make of commercial aircraft in America today.

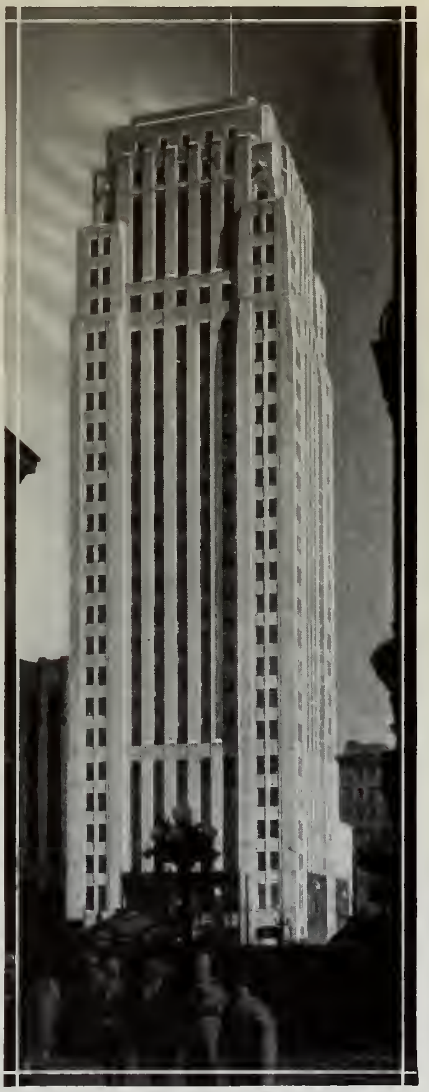
Isn't this the type of ship that *you* would like to fly? Write for complete information.

THE WACO AIRCRAFT COMPANY, TROY, OHIO

WACO AIRPLANES

"ASK ANY PILOT"

THE RAND TOWER
MINNEAPOLIS



Men or industries serving the seven million people in the Ninth Federal Reserve District, and seeking an effective business address, may well consider the new Rand Tower in Minneapolis. ¶ Located at the very heart of the Minneapolis financial and business section, the Rand Tower offers distinct advantages to firms of national scope using a Northwest address. Efficient office space, an association with names well known in the Northwest, a location of prestige . . . these are a few of the many considerations. . .

THE RAND HOLDING COMPANY
A UNIT OF
RAND COMPANY
MINNEAPOLIS

use it as a base for his 260-foot yacht, the Aztec, on which he went cruising last summer.

Virginia

Patriarch of Property

That the oldest piece of property in America in the possession of the original owning family should be an island is to be expected. The kaleidoscope of shifting times and customs whirls at a slower pace in such isolated regions. In the year 1635 a large island in the James River was granted by the Crown to Captain Francis Eppes, a member of the Colonial Council. Today the island is the property of the captain's descendant, Miss Mary Eppes. For nearly three centuries her family has remained in tranquil possession of their island, undisturbed by the successive movements in land values that have again and again transformed the mainland.

Oysters

Assateague Island was once the home of a warlike Indian tribe of that name. In 1659 this belligerent tribe was unlucky enough to have a disagreement with a Colonel Edmund Scarburgh, who was the Miles Standish of the Virginia coast. In consequence the Assateagues hastily went away from there, leaving the island to the white men. The latest paleface usurper of Assateague is Samuel B. Field, of Baltimore, who manufactures men's clothing. As he rides along his twenty miles of surf-bordered beach, his ponies often kick from the sand an Indian tomahawk or arrowhead. In the marshes, tidal lagoons, and salt creeks that net the island, large flocks of wild fowl find protection, and along the hard beaches range the famous Chincoteague ponies and beach cattle, wild and undisturbed. Domestic stock-raising is equally flourishing: Mr. Field has over two hundred head of saddle ponies and a large herd of Hereford and polled Angus cattle. To bivalve fanciers, however, the existence of Assateague Island is justified not by its cattle or wild fowl but by the luscious oysters, famed for decades, that are gathered in one of its reaches known as Tom's Cave.

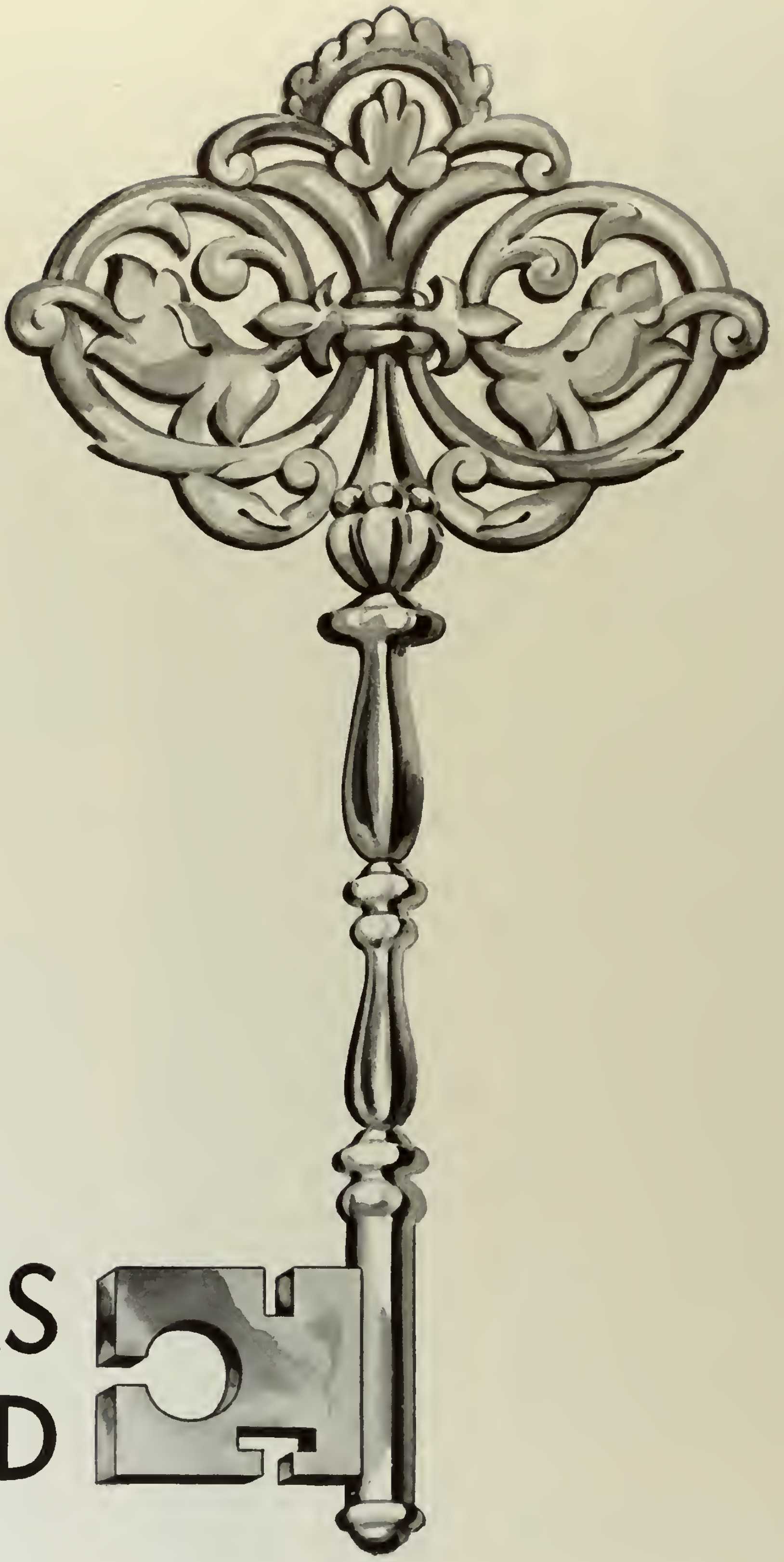
North Carolina

Communism

Mrs. A. Hoffman has spared no pains to protect her Bogue Island from natural and human injuries. Each tree around her handsome, curiously wrought house bears a lightning rod. Hardy would be the picknicker who rowed out from the mainland, for he would run the risk of being shot at by armed guards. Autocratic, exclusive Mrs. Hoffman walks through her forests disturbed only by grey curtains of Spanish moss swaying in the wind off the Atlantic. If her walk takes her, however, to the north end of her seventeen mile island, her calm is shattered. For there reposes the fly in the Hoffman butter, the thorn in the Hoffman side: the small fishing village of Salter Path. Its population of 171 souls have no title to their land except that of immemorial usage. Not a man in the town owns the house he lives in. No one owns it. Everyone owns it. The men go deep sea fishing and divide the catch share and share alike, as they have done for two centuries. Picturesque as this primitive communism may be, it does not intrigue Mrs. Hoffman, who insists that she and not the fishermen owns the island. They retort that they have lived there before there ever were Hoffmans and that, God willing, they will live there until that happy state of affairs comes about once more. Winters, Mrs. Hoffman amuses herself by trying to dispossess her neighbors, who cling to their Salter Path like limpets to a rock. After the inevitable failure each year, she goes off to Paris and forgets as much as possible her tenacious tenants.

The Squire

Did the inhabitants of Currituck County know the usages of old England, they would probably call Joseph Palmer Knapp "the Squire". When Mr. Knapp bought Knott's Island from Thomas Dixon, whose novel "The Klansman" was transmuted into D. W. Griffith's "The Birth of a Nation," he thought he was merely acquiring a place to shoot ducks. It was not until he was arrested by a native game warden for shooting too many ducks that Mr. Knapp realized that the region was inhabited. When an ignorant but earnest county magistrate fined him $25, Mr. Knapp first grew angry, and then interested. So far he has spent twenty thousand times that amount on the county school system, which is one of the finest in the country. He can well afford $500,000 school systems, being Chairman of the Executive Committee of the Crowell Publishing Co., which puts out the *Woman's Home Companion*, *Collier's Weekly*, and the *American Magazine*. To his surprise, he has found that he likes the people of the region and



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Advertisers Incorporated prepares and places the advertising for all divisions of Chrysler Motors, comprising Chrysler, Dodge, De Soto and Plymouth passenger cars, Dodge Brothers trucks, buses and motor coaches, Fargo commercial cars and Chrysler marine engines. « « The services of the carefully-selected and widely-experienced personnel of this agency are available on additional accounts.

ADVERTISERS INCORPORATED, 7310 WOODWARD AVENUE, DETROIT

LEE ANDERSON, President

B. A. McDONALD, Vice-President and Treasurer

Tek
Johnson & Johnson

A MERGER
of interest to people who sometimes mislay or forget things

If we all had perfect memories there would still be plenty of reason for Tek's popularity. Since most of us are still a shade off perfect, reasons are overshadowed by necessity and Tek becomes an essential to the art of pleasant living.

Events leading up to the merger

When you clean your teeth do you always remember to give your gums their exercise? They enjoy it. Do you never forget to use dental floss for the tight spaces between the teeth? Two extra memorabilia for a refreshed mouth. Cleaning, massaging and dental floss have been merged in Tek.

A better brush at both ends

Tek combines in one unit: 1—a small, springy brush-head that gets nimbly around your mouth; 2—extra width in the brush-head which automatically, at every brushing stroke, invigorates your gums; 3—two months' supply of dental floss always at hand in the handle—you can't mislay or forget it. Tek is a product of the world's largest makers of dental and surgical dressings.

Johnson & Johnson
NEW BRUNSWICK NEW JERSEY

Tek
the modern
TOOTH BRUSH

Tek is made in two models: as illustrated or with a plain flat handle, no floss. In five colors of Lucite (black, red, green, blue, yellow) or amber. Tek Jr. for the children.

that they seem to like him. In his handsome island mansion he employs all native help, down to the cooks and scullery maids. When he is able to escape from his publishing duties and get down to his island, Mr. Knapp spends some of his time shooting and the rest in hectoring the county into progress.

Georgia

Millionaires

Until two hundred wealthy families, including the Morgans, the Drexels, the Goulds and the Rockefellers founded the exclusive Jekyll Island Club, the romantic seacoast of Georgia was almost unknown. Attracted by Jekyll's broad, smooth beaches and its natural yacht basin, and also, no doubt, by its seclusion, the founders of the Club took the first step in the development of this forgotten region. Today the Georgian seaboard is the winter playground of the du Ponts, the Carnegies, Henry Ford and many another wealthy family.

The President

A year ago Sapelo Island, the estate of Howard E. Coffin, Detroit automobile power, was known chiefly to friends of its owner. But last Christmas Mr. Coolidge was a guest at Sapelo. The public saw and heard him, via the talkies, as he moved slowly along mossy roads in a creaking oxcart, rifle at rest on the presidential arm. And the public learned, via the newspapers, that he had good hunting in Mr. Coffin's well-stocked forests, that he enjoyed his stay in the large Spanish mission residence, and that Mrs. Coolidge disported herself gaily in the blue-tiled, glass-domed swimming pool. Thus did an island become the focus of a nation's curiosity.

Slaves

Last June, C. M. Keys, head of the Curtiss aviation interests, became chairman of the $70,000,000 company which includes Curtiss, Wright, etc. Mr. Keys bought St. Catherine's Island, just north of Sapelo. Associated with him in the purchase were Mr. Coffin and J. C. Willson, also an important figure in aviation. They intend to use it as most Georgia islands are now used, as a playground. St. Catherine's is more of the past than of the present, its title being as ancient as any in the state. In 1566 Adelantado Menendez claimed the island for the King of Spain and settled on it Jesuit missionaries. Its owner in revolutionary times, a half-breed Indian woman, Mary Bosomworth (née Princess Coosaponakesee), sold it to Button Gwinnett, who later immortalized himself by signing the Declaration of Independence—and very little else. So rare is his signature, by far the rarest of the signers, that a collector paid $52,000 for it a few years ago. Though the island has changed hands several times since the expensive Mr. Gwinnett, the acres of virgin forests and white beaches remain the same. Surrounded by cotton fields stand the old slave quarters, square barrack blocks that face each other across the "street". Old-style Southern darkies, who think in terms of "the Boss" and "the chillun" still live in the quarters that once sheltered their slave fathers and grandfathers.

Florida

Romance

On the Admiralty charts it is Salt Cay Island, but to the McCutcheons and their guests it is Treasure Island. In 1916 John T. McCutcheon, whose cartoons appear every morning on the first page of the Chicago *Tribune*, was looking around for what he vaguely described as "a tropical island in the pirate belt". Salt Cay seemed to meet the requirements, and so he promptly bought it, sight unseen. Today it has many of the characteristics of a pirate island of the orthodox romantic type. Some of these are natural, such as caves, grottoes, reefs, coral beaches, lagoons and savannahs. Artificial embellishments, mostly the inspiration of the McCutcheons and their guests, are a stone watch tower, a fort with ancient cannons, "the residency", and the customs house, which is embellished with McCutcheon murals on pirate themes. The easy flow of existence on Treasure Island is apparent from the privately-printed "Island Song Book", which gives as the island anthem, "Too Late but Never Mind". The indolent Treasure Islanders are also fond of harmonizing "O Sole Mio", "Never Take the Doorknob from the Door", "The Microbe's Serenade", "That Old Time Religion" and "Love's Old Sweet Song". In the Island Song Book the late Bert Lester Taylor wrote of the star, Canopus:

"When men are calling names and making faces,
And all the world's ajangle and ajar,
I meditate on interstellar spaces
And smoke a mild seegar."

Choose Your Insurance Company

STRENGTH
SAFETY
SERVICE

as Carefully - as You Choose Your Bank

IN selecting your bank, you choose for strength, for safety, for service. The same important considerations should govern the placing of your insurance. The safety of your business—in emergency—depends upon the strength and safety of the insurance companies chosen to protect it. And service, from your insurance company—when needed—is absolutely vital.

Shrewd Business Men Choose CENTRAL

CENTRAL is a mutual company—one of the largest and strongest in the United States engaged in a general fire insurance business. Measured by any test of solvency, its strength is unquestioned—its policies absolutely safe. Organized in 1876, it has a record of over fifty years of fair adjustments and prompt settlement of claims. Careful selection of risks and conservative management have made it possible to return a substantial dividend to policy-holders—30% for the last eight years—a definite saving in insurance cost.

Significant Figures from Financial Statement of July 1, 1929

Total insurance in force	$373,157,824.00
Total assets	4,023,993.00
Cash surplus . . .	2,036,749.00
Losses paid in 1928	1,063,450.00
Losses paid from organization to July 1, 1929	13,249,859.00
Dividends paid in 1928	736,190.00
Dividends paid from organization to July 1, 1929 . .	6,481,906.00

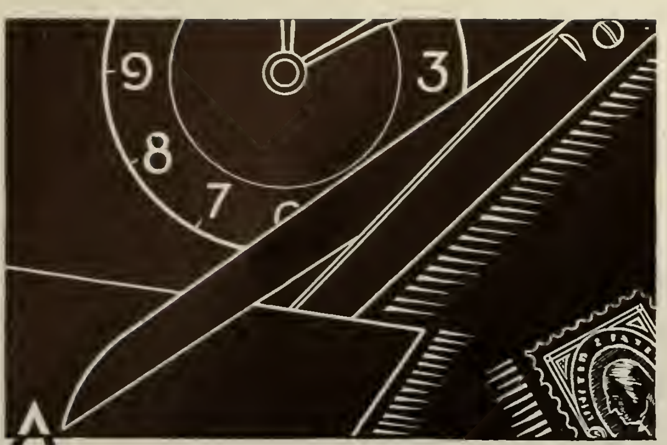
"An old line, legal reserve, dividend paying mutual fire company."

CENTRAL offers this strength, this safety, this service—and this saving—to individuals or corporations whose business or property can qualify as first-class in moral and physical risk. Full information on request.

Organized 1876 *The* **CENTRAL** *A Friendly Company*

MANUFACTURERS MUTUAL INSURANCE COMPANY
VAN WERT, OHIO

FIRE, AUTOMOBILE AND TORNADO INSURANCE FOR SELECT RISKS



A clip of the Scissors.. a Stamp...and 12 minutes

. . . may save $20 on every $100 you spend for paper

INVESTIGATION shows that many firms can save fully 20% of their annual expenditures for record paper and correspondence paper and yet obtain greater security for their vital records — greater impressiveness and prestige in their letters.

For considerably less than you probably pay at present — surely at no *additional* cost—you can be certain that your valued records and documents will withstand the destructive action of time and constant use—that your business and professional stationery will have the impressive character and dignity which befit your correspondence.

A straightforward brochure — brief, concise, direct — tells busy executives just how this can be done. It takes but a few minutes' reading time. Yet it answers such questions as the following:

"How can I be *certain* that my vital records and documents will endure as long as they should — that they are not insidiously disintegrating with time?"

"How can I *know* that my stationery possesses the quality and character which its importance demands?"

"How can I attain both these results without increasing my annual paper costs — perhaps at a worth-while saving?"

Have your secretary clip and mail the coupon below. A copy of "Certified Papers" will reach you promptly. It will take but a few minutes' time to learn several facts of vital importance to your business. L. L. Brown Paper Co. Adams, Massachusetts.

L. L. BROWN Certified PAPERS

. . . for the protection of whatsoever is valuable

L. L. BROWN PAPER CO., Adams, Mass.

Send a free copy of "Certified Papers." This entails no obligation whatsoever on my part.

Name

Address

City State

© 1930, L. L. B. P. Co.

It is for the observation of this soothing star that the Watch Tower was built, though the song book hastens to add in a footnote: "Canopus is visible from all parts of the island."

California

Fiat Insula!

Thus pronounced last winter the wealthy M. F. Bramley, as he cruised off lower California seeking a likely site for an island. By spring he had found his site, revealed to him in a dream, and was ready to start operations. He will build a circular breakwater and make an island within it by the simple process of pumping water out of the enclosure and sand into it. A contractor of wide experience, and fortified with a staff of technical experts, Mr. Bramley expects to build his island with little difficulty. He was forced to the heroic measure of creation because he wanted an island off southern California. With the exception of Santa Cruz, Santa Rosa (see below), and Santa Catalina (see below), all the islands in the region are owned by the government. If Mr. Bramley had been content with an Atlantic seaboard island, he could have had his pick of thousands, tiny and great. When his isle is built, however, Mr. Bramley will eclipse all other island monarchs, whether in California or in Georgia. He will be not only monarch but also creator of all he surveys.

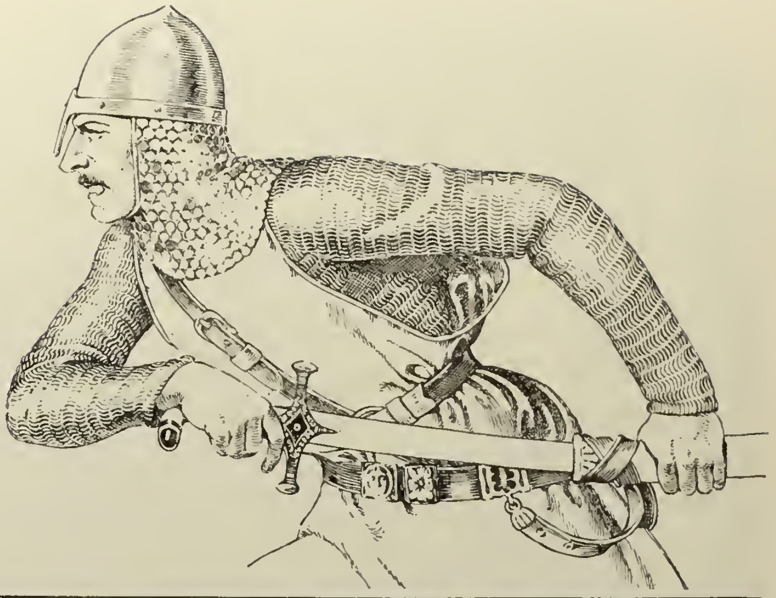
Gold Mine

When William Wrigley Jr. bought Santa Catalina Island a few years ago, he was buying what was literally and figuratively a gold mine. Literally, because four Wrigley mines are exploiting the island's deposits of gold, silver, lead and zinc. Figuratively, because lavish improvements and even more lavish publicity draw thousands of people from Los Angeles to spend a gay week-end on the island. Twenty-three miles of Pacific water separate Catalina from Los Angeles Harbor, but Mr. Wrigley has set a $1,000,000 steamer to carrying holiday-makers back and forth. Other bright ideas are a large and luxurious hotel, a golf course, numerous tennis courts, and an airplane landing field. Mr. Wrigley wanted his pet island to have the largest ballroom in the country, and so he set about building a theatre with a dance palace above it. Incomplete, the structure has passed the $2,000,000 mark; its dance floor will contain 18,000 square and about 10,000 human feet. A sizable foothill known as Sugar Loaf blocked out from incoming steamers the view of this palace. Mr. Wrigley is having it removed and dumped deep into the blue Pacific. There is a great deal of method, however, in the Wrigley madness. Whatever he tackles, whether it be a summer resort or a baseball club, he makes it pay; and the $2,000,000 which he paid for Catalina is turning out to be a good investment.

The Late Mr. Valentine

A sort of addendum to Catalina, a postscript of two acres, White Rock Island has long been as obscure as the conventional violet by the mossy stone. In 1925 the feminine curiosity of Mrs. Helen K. Morton led her to peer into its status. When she found that the existence of White Rock was recognized neither by real estate agent nor by government map, her feminine sympathy was aroused and her equally feminine intuition told her that here was opportunity. Though the U. S. Land Office was very sceptical about White Rock, it was finally brought to the point of admitting its existence. "What will it cost me?" asked Mrs. Morton, but the Land Office held up an official hand. Being without an owner the land became public domain; and public domain was not for sale. The usual way to acquire it is by "homesteading", but Mrs. Morton disliked the idea of living three years on a two-acre table of rock. Then she heard of the late Mr. Valentine. In 1846 a friend assigned to him some 13,400 acres of land, but so dilatory was Mr. Valentine in filing claim with the government that he found himself squatted out of his holdings. The late Mr. Valentine thereupon raised so loud an outcry that the government gave him scrip, or certificates, entitling him to 13,400 acres of public domain anywhere in the country. Shrewd, lazy, he took up no acreage; instead he sold his scrip bit by bit to people wishing to acquire land from the government. Though very little Valentine scrip remains unredeemed, Mrs. Morton unearthed several acres of it in the hands of one Jacobs, in Colorado. Presenting it to the Land Office, she received patents to White Rock. Feminine to the end, she does not know what to do with her island now that she has it. Says this beneficiary of the late Mr. Valentine: "I never owned an island before. It seems even now that it may be the result of a belated reading of 'Cinderella' and an indiscreet rarebit. I am quite

Even the finest steel of old Damascus...



XVII Century Damascus sword now in the Metropolitan Museum of Art, New York

...could not equal the special steel in *Simonds* fine cutting tools

TREASURED by kings and warriors of old, weapons of finest steel were often the proudest possessions of an empire. Yet even the steel in the famous Damascus blades cannot equal the special alloy steel used in Simonds products.

With medieval swordsmiths, the choicest blades were the result of patience, perseverence... and luck! Today, Simonds uniform alloy steel is the product of scientific methods, modern facilities... and precision.

Each step in the making of Simonds electric furnace steels is controlled by specialized knowledge aided by the most complete equipment known in the steel industry. In the Simonds research department, metallurgists are constantly making tests to insure uniformly high quality. Simonds pioneered in developing the special cutting steels demanded by present-day production methods.

The perfection of Simonds electric furnace steel was the answer to the problems of maintaining the exacting standards of quality and uniformity for Simonds products. Consequently the name, Simonds is recognized as a mark of perfection... the symbol of modern master-craftsmen... just as years ago the initial of the Damascus sword-maker meant unquestioned superiority.

SIMONDS SAW AND STEEL COMPANY

Boston . . Mass.
Memphis . Tenn.
Seattle . . Wash.
Chicago . . Ill.
Detroit . . Mich.
Portland . . Ore.
New York . N. Y.
New Orleans . La.
Atlanta . . . Ga.
San Francisco. Cal.
Los Angeles, Cal.

Established 1832 . FITCHBURG, MASS.

PRODUCERS OF *Circular, Band, Metal, Cross-Cut, Gang and Drag Saws; Machine Knives; Files; Hack Saw Blades; Tool Holder Bits; Saw Tools; Discs; Steel.*

AFFILIATED COMPANIES

WAPATT, INC., Pittsburgh, Pa., *Manufacturers of Portable Electric Saws and Tools* ~ THE ABRASIVE CO., Philadelphia, Pa., *Producers of Abrasive Grinding Wheels and Polishing Grain* ~ SIMONDS GUARANTEED CUTTER-HEAD COMPANY, Seattle, Wash., *Manufacturers of Guaranteed Cutter-Heads.*

HACK SAWS

MACHINE KNIVES

CIRCULAR SAWS

ABRASIVES

ELECTRIC TOOLS

CROSS CUT SAWS

SIMONDS INDUSTRIES

World's Largest Saw Makers

BACK OF THE EDGE..THE STEEL . . . BACK OF BOTH..SIMONDS

Admiration—The final touch to a perfect shave

ROLLS RAZOR

The ONE BLADE Safety

IF testimonial copy were being used in the presentation of Rolls Razors to the men of America, innumerable pages could be filled with unsolicited letters of commendation written by representative business men from all parts of the country. Among them are a few who stated that the Rolls Razor advertisements are entirely too modest in their claims.

These sincere tributes will not swerve us one iota from our belief that the truth simply told about an article of real value will bear more weight, with the thinking man, than pages of glowing generalities.

From actual tests, as well as from the spoken and written words of hundreds of others, we know that the one hollow ground Rolls Razor blade of finest Sheffield steel will give a clean, smooth, non-irritating shave, and will continue to do so for years.

No longer will you have to try your patience and waste your money continuously purchasing innumerable packages of good, bad, or indifferent blades.

The first cost may be slightly higher—but *how many blades do you buy a year?*

Ask your dealer to explain the Rolls Razor way and your shaving worries will be over forever.

Imperial No. 1 Silver Plate $15.00
Imperial No. 2 Nickel Plate $10.00
De luxe gold sets and Travel Kits priced up to $32.50

We recommend Imperial Rolls Shaving Soap in hygienic, indestructible bowl for a superior shave. Priced at $1.50. Or Rolls Shaving Cream. Priced at 75c.

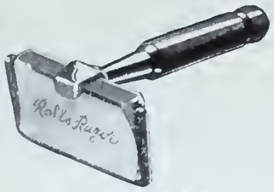
For sale at the better shops throughout the world

Descriptive Folder Sent on Request

LEE & SCHIFFER, Inc. U. S. Distributors
Dept. F.—11 East 11th St., New York City

COMPACT
Complete in its case—Razor, strop and hone.

THE ONE BLADE
of finest Sheffield steel and hollow ground, is stropped in its case before shaving and honed in its case when necessary. Properly handled, it will give a lifetime of perfect shaves.



READY FOR SHAVING
Simplicity itself—just the one blade and its handle.

frankly undecided what to do with it and am open to suggestions."

Livestock

Californian island though it is, Santa Rosa has a chilly climate. Most of the year the Northwestern trade winds ripple the long grass on the low, rolling hills of the island. This grass is important to the proprietors of Santa Rosa, the five Vail brothers of Los Angeles, because it feeds their sheep, cattle, saddle horses. They have made the island into a sea-girt Wild West ranch, whose rolling pasture lands are surrounded by salt water instead of prairie. In the steep, rocky canyons that cut across the hills the herds find fresh water. Except for a few acres of vegetables and some barley fields for the saddle horses, there is no cultivation on Santa Rosa. All is given over to stock raising: the brothers Vail have built two ranch houses, four stock barns, corrals and a wharf from which to ship the stock to the mainland.

The Princess of Golondrina

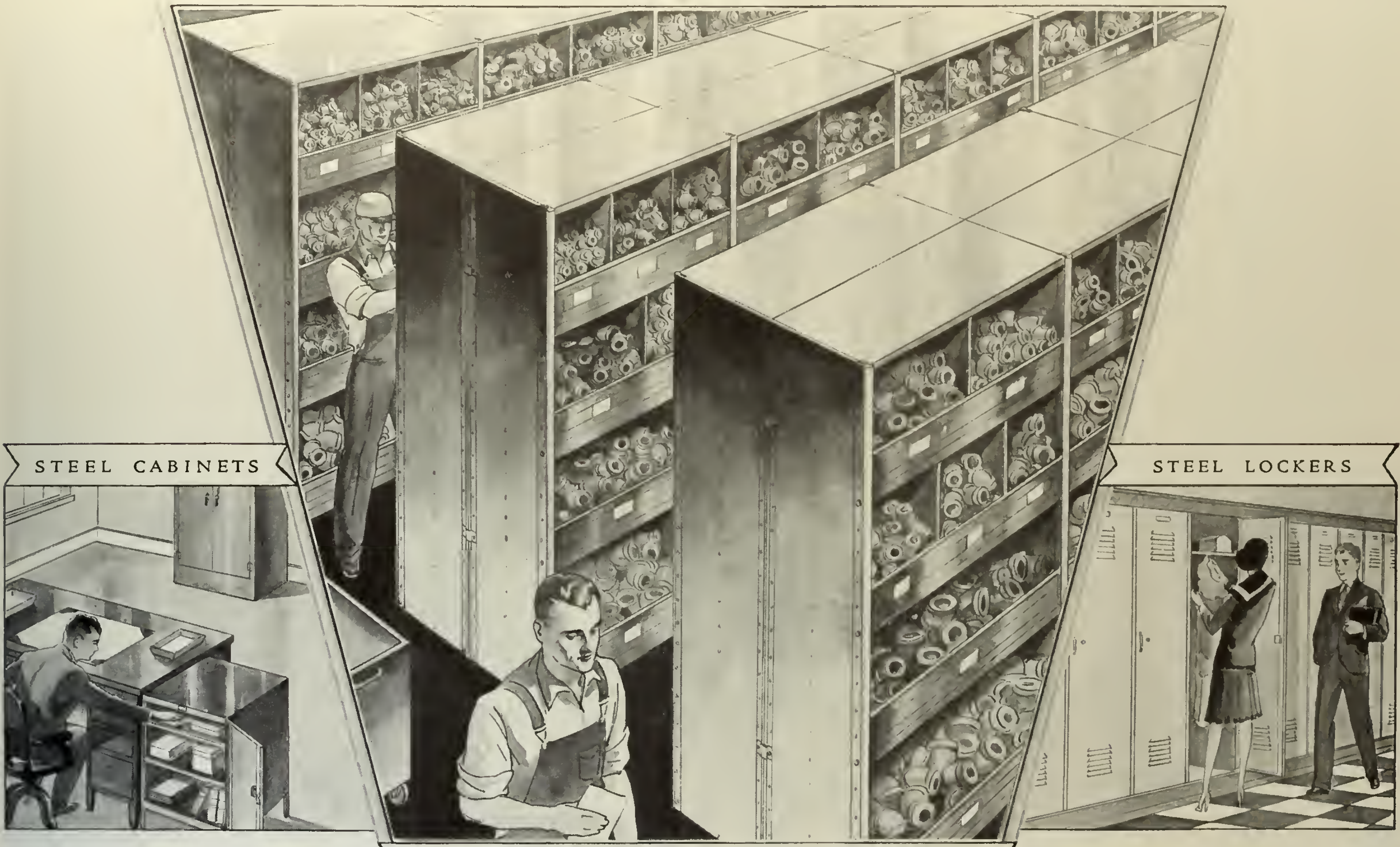
Desiring the proper background for her writings on the old Chinese Imperial court, the wealthy Princess Der Ling created it on her own island. Three years ago she leased from Mexico the tiny island of Golondrina, off southern California, and set up a court of 150 retainers with 20 American ex-Marines as a palace guard. All day she worked on her memoirs, amusing herself in moments of relaxation with "command performances" by singers and dancers of every nationality whom she had summoned to the palace. Order was kept by the husky ex-Marines, who patrolled the grounds day and night under the command of Arthur Burks, once a lieutenant in the Marine Corps, who was rumored to have rescued the Princess from a revolutionary outbreak in China under highly romantic circumstances. Keeping order among 150 women of various nationalities was no sinecure, nor was the duty of putting the dancers through setting-up exercises at 7:15 a.m. especially attractive. At long intervals the Princess would hold court in the most impressive manner, all her attendants, even the leathernecks, being rigged out in elaborate Chinese robes of ceremony. Ascending her gilded throne, the island potentate pronounces final judgment on any misdeeds that might have taken place, and arbitrates the inevitable hair-pullings and face-scratchings among her retainers. The judicial proceedings over, dancers, French, Spanish and Chinese troop in and go through their performances; a fancy drill by the marines, in red and black costumes, ends the official program. Slipping off her stiff court costume, the Manchu princess stands revealed in a French evening gown. As an American jazz orchestra strikes up, all formality disappears, and soon the ladies-in-waiting are dancing with the marines or any visitors who happen to be staying with the Princess. In the end, however, this little kingdom was dissolved by its creator as easily as she had built it up. Her book was finished, and she was growing weary of the endless intrigues and quarrels of her court. So the Princess went off to Los Angeles and her costly heirlooms journeyed to the vaults of California banks. A hundred servants remain in her palace, ready to set up for the Princess once more her toy-theatre Chinese empire.

Washington

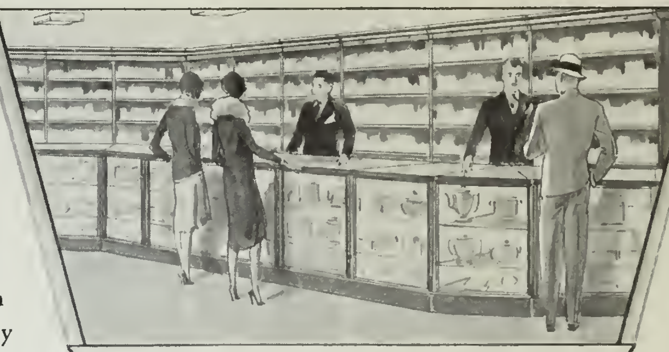
Suburban Wilderness

The island birthplace of the Indian chief, Seattle, barely eight miles from the city of that name, remains today in about the same natural state as when the great chief was born on it. When Captain Vancouver, of the British Navy, discovered the island in 1792, he neglected to name it, and as a consequence it has been known variously as "High Island", "Smugglers' Island", and "Blake Island". About twenty years ago the post-office settled the matter by dubbing it "Trimble Island," after its owner, William Pitt Trimble, a retired Seattle lawyer. Last month Mrs. Trimble was drowned in Elliott Bay, near Seattle, when her car was driven off a dock into the water. Her husband and two sons escaped, after vain efforts to rescue her. The deer around Puget Sound know Trimble Island as a refuge, and they swim for it when the hunting season begins. Others besides the deer would like to take refuge on the island: often in the dead of night the Trimbles hear the subdued sound of boats, usually from Canada, boats that carry no lights and do not welcome the curious on board. Sometimes there is a whisper of muffled oarlocks and a keel grates slightly on the beach, though three caretakers see that this does not occur too often. Some day Mr. Trimble will present Trimble Island to the city as a municipal park, a green fragment of nature surviving in a world of progress and subdivisions.

To *make your floor space* MORE *productive*



LYON STANDARDIZED STEEL SHELVING



RETAIL STORE EQUIPMENT

Greater earning power from each square foot of floor space is vital to manufacturers, wholesalers, retailers, institutions. To store more stock on the same space—to increase sales at lower cost—to speed up the handling of materials and merchandise—to secure better stock control—these are problems common to producer and distributor. . . . One of the many Lyon products that will help your floor space earn more is Lyon Steel Shelving. In many cases the careful arrangement of shelves, bins and dividers to exactly fit the materials or supplies to be stored will save 20% to 40% floor area, and increase stock room efficiency. All parts are standardized and interchangeable, so that the shelving can be easily adjusted or expanded to meet changing conditions. Especially important is the fact that the initial savings you make by installing Lyon Steel Shelving will continue year after year. . . . You will find at the bottom of this page other Lyon steel products helpful in storing and displaying goods to better advantage. Whatever your business, Lyon will be glad to talk over with you, without obligation, the possibilities of more profitable and effective use of your floor space. This service is backed by thirty years of specialized experience and study in the storage and display of goods. Representatives in all principal cities await your call. Factories and warehouses are well located to give you prompt service. . . . Write for book, "Cutting Costs with Steel Storage Equipment." Or, if you are a retail merchant, ask for "Lyon Store Furniture and Fixtures," illustrating the most modern developments in store equipment.

LYON METAL PRODUCTS, INCORPORATED
AURORA · ILLINOIS

BURLINGAME
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LYON

STEEL STORAGE *and* DISPLAY EQUIPMENT

Standardized Steel Shelving
For stockrooms, toolrooms, warehouses. Sold through Engineering Sales Offices in principal cities.

Steel Lockers of all Types
For businesses, schools, clubs and other institutions. Sold through Engineering Offices in principal cities.

Storage and Wardrobe Cabinets
A complete line and price range for every business, institution and home. Sold by Office Equipment Dealers.

Automotive Store Equipment
Steel shelving, counters, display cases, lockers and shop equipment for all automotive dealers. Sold by Automotive Jobbers.

Store Furniture and Fixtures
Display shelving, merchandise tables, counters, show cases. Sold direct by specialists in store furniture and fixtures.

The Biltmore's Profit

(Continued from page 76)

Salt Lake City and San Francisco.

As complete as this are the records of every item of expense. With equal ease Mr. Schuyler could tell you that on January 20th the steward ordered and received 270 dozen eggs, of which 100 dozen were Hennery Browns, 170 Hennery Whites, that on the same day he ordered and received a ton of meat, of which 400 pounds of the cheapest cost 15 cents a pound, and 60 pounds of filets cost 93 cents a pound. Even more surprisingly, Mr. Schuyler, anticipating customary breakage, would know how many barrels of ice-tea glasses would be needed in June, in August, in September.

Like an army

Obviously, it would be impossible for Mr. Schuyler himself to superintend the activities of the numerous persons who do his housekeeping and cooking and washing and bookkeeping, and of the servants who minister to the servitors. Wherefore he must organize his force like an army with commanders and liason officers appropriate to each branch of the service. Only thus can he bring about any sort of coordination in a household that contains such disparate elements as a chapel for meditation, a laundry where 30,000 pieces of household linen are washed every day, an atelier where pastry-cooks may on special occasions be called upon to build bells of candy and drydocks of sugar, a smithy where new bottoms are brazed on old copper kettles, a playroom for children on rainy days. To trace the course of authority from Mr. Schuyler down through all of its ramifications to those persons who have no direct authority at all except over unemotional and inanimate objects such as scrubbing brushes, pails and mops would bewilder a genealogist. But a general idea may be obtained by consideration of the main subdivisions.

THESE WOULD PLEASE GOVERNOR SMITH MOST IF THEY PREPARED BOSTON SCROD

The building

In charge of the Hotel building and all its physical properties are the engineer, Mr. Broadfoot, and the superintendent, Mr. Carey. Between them they spend what it costs to keep the ground on which the building stands and keep the building lighted, heated, powered, repaired, renewed and redecorated. It is up to Mr. Broadfoot and his staff of 44 to see that power reaches all machinery and lighting fixtures, to see that no fuses long remain blown, no drains clogged. For three years, under his direction, plumbers have been replacing iron pipes with brass, stealthily moving from room to room lest they disturb a guest with their banging and clattering. In times of emergency he is commander-in-chief of the building. Should a fire break out his men would take charge of all elevators . . . it is up to him to see that the passenger elevators smoothly run their 10,000 vertical miles a year, that the freight elevators, which in their time have carried to the upstairs dining room such curiously unrelated matters as cream-puffs and live elephants, do not fail

COPYRIGHTED BY GABRIEL MOULIN

In line with San Francisco's Skyline...

THIS is an advertisement of a San Francisco printing organization that believes in the tremendous future of the Pacific Coast—a future for those now here and for those broad-visioned Eastern concerns who plan expansion Westward.

When you come to San Francisco, you will be impressed with many things, among them the excellent printing facilities this city offers.

When larger plants are mentioned, you will hear the name "Knight-Counihan". Folks will tell you of our reputation for fine color work; our creative facilities for the production of advertising and sales literature; that we are exclusive licensees for the Jean Berte color process; that we do advertising typography, lithographing; and are recognized by the San Francisco Stock Exchange for the manufacture of financial securities.

They will also tell you that Knight-Counihan serve many of the leading business establishments on the Pacific Coast.

We consider it a privilege to call these facts to your attention in a publication so symbolic of progress in the printing industry.

KNIGHT-COUNIHAN CO.

Printers · Lithographers · Typographers · Engravers

500 SANSOME ST. · SAN FRANCISCO · CALIFORNIA

A Profit is not without honor
~ *anywhere*

THE dividend check and the balance sheet are but symbols of success. The purpose of being in business is profit.

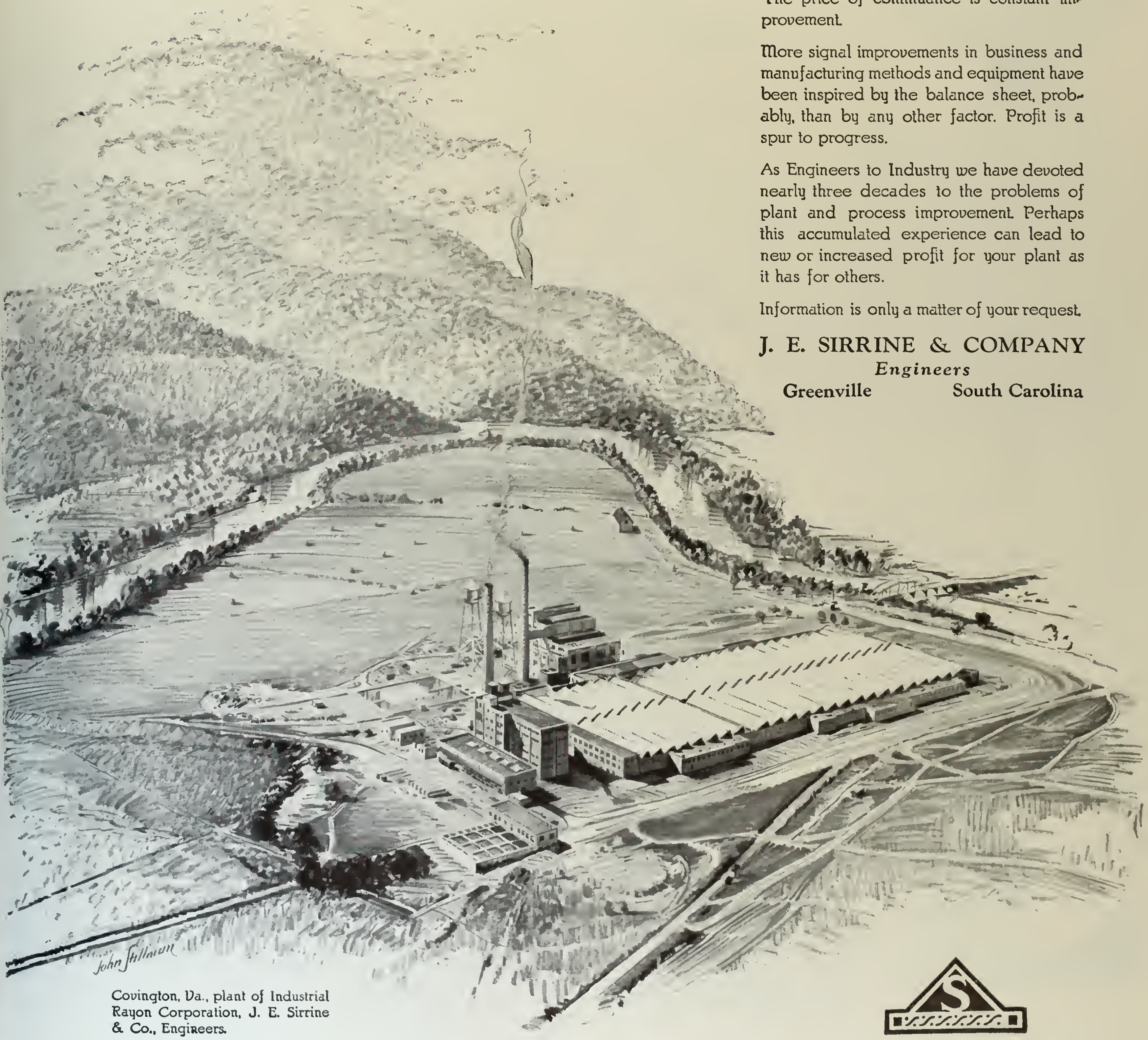
The price of continuance is constant improvement.

More signal improvements in business and manufacturing methods and equipment have been inspired by the balance sheet, probably, than by any other factor. Profit is a spur to progress.

As Engineers to Industry we have devoted nearly three decades to the problems of plant and process improvement. Perhaps this accumulated experience can lead to new or increased profit for your plant as it has for others.

Information is only a matter of your request.

J. E. SIRRINE & COMPANY
Engineers
Greenville South Carolina



Covington, Va., plant of Industrial Rayon Corporation, J. E. Sirrine & Co., Engineers.

5th and LAST

IS there any logic that can keep more and more makers of furniture hardware and weavers of upholstery materials from locating here?

For the active Piedmont Carolinas' furniture industry, fifth in the Nation, is still importing the bulk of its upholstery fabrics, varnishes, and finishes, and *all* of its hardware.

Only three years ago there was *no* local source of supply for tapestries, velours, brocades and other fabrics used by the furniture industry.

Today, those factories that have been established here have made exceptional progress. There is still room for many more. They *do not have to hunt for a market.*

As to the making of hardware, the field is still completely open. Yet every factor that favors success exists right here.

Why not know? The facts are here for you in this book—"*Piedmont Carolinas.*" Address Industrial Dept., Rm. 2935, Mercantile Building, Charlotte, N. C. Your inquiry will be answered promptly. *Write.*

RESORTS INDUSTRY FARMING

DUKE POWER COMPANY

SOUTHERN PUBLIC UTILITIES COMPANY AND OTHER ALLIED INTERESTS

to perform their 30 miles a day.

Mr. Broadfoot's work keeps him behind the scenes, up among the ventilators, or under the Turkish bath, next in the refrigeration room where tons of ice may be made in a single day. His main preoccupation is to see that his 21 stories and 12,400,000 cubic feet of building are in running order.

Mr. Carey collects the $295,000 the store and office lessees pay and finds room, wherever possible, for more of them. With his staff of carpenters and joiners he keeps the building in repair and, when necessary, orders new carpet for his two miles of corridors.

The housekeeper

One of the most important personages of the house personnel who is brought in intimate contact with the guest is Mrs. M. S. Dean, the housekeeper. It is her ambition to make every room different in furnishings and decorations.

Contrast Mrs. Dean, the housekeeper for half a million, with the housewife in the far west who has a family of four to care for. The housewife has her troubles, but what a picture Mrs. Dean would make in Madison Square Garden or Central Park in the midst of her half million; persons of all nationalities—princes and princesses, dowagers, maids and matrons, politicians, debutantes and brides, all talking different languages, and Mrs. Dean equal to the occasion. She has smoothed out the difficulties of centuries, those of the woman who would have no servants in her room, the lady who must have her linen and meals laid at her door; the lady who must have her linen lying on the radiator a week before she would use it; the man who couldn't sleep on a mattress that was not initialed as his own. Mrs. Dean has under her 117 chambermaids, bathmaids and cleaners.

Hers is the greatest contribution to the laundry where 35 labor to turn out an average of 30,000 pieces of hotel laundry a day in addition to 50 bundles of guest work. Last October the long rows of churning washers, roller presses, centrifugal dryers and squads of ironing boards turned out a daily average of 36,709 pieces of hotel wash. The week's wash of the Biltmore, hung out on a line, would make a tent the length of Manhattan island.

Kitchens

Prouder than the members of any department in the Biltmore are the kings of the cuisine; and they have world-wide reputations in their seats among the mighty. After all, it is the stomach that is satisfied which gives the greatest popularity to the hotel. Louis Seres, the Biltmore chef, has cooked for kings and queens and lesser lights of royalty, for statesmen, soldiers, and for the President of the United States. He was borrowed from the Biltmore by Secretary of the Navy Josephus Daniels to act as chef for the Peace Ship, George Washington, which bore President Wilson across the seas. When King Albert and Queen Elizabeth of Belgium wanted to visit the United States, Secretary Daniels again pressed him into royal service for the navy, feeling that the fodder of the battleship was not sufficiently unctuous for royal palates.

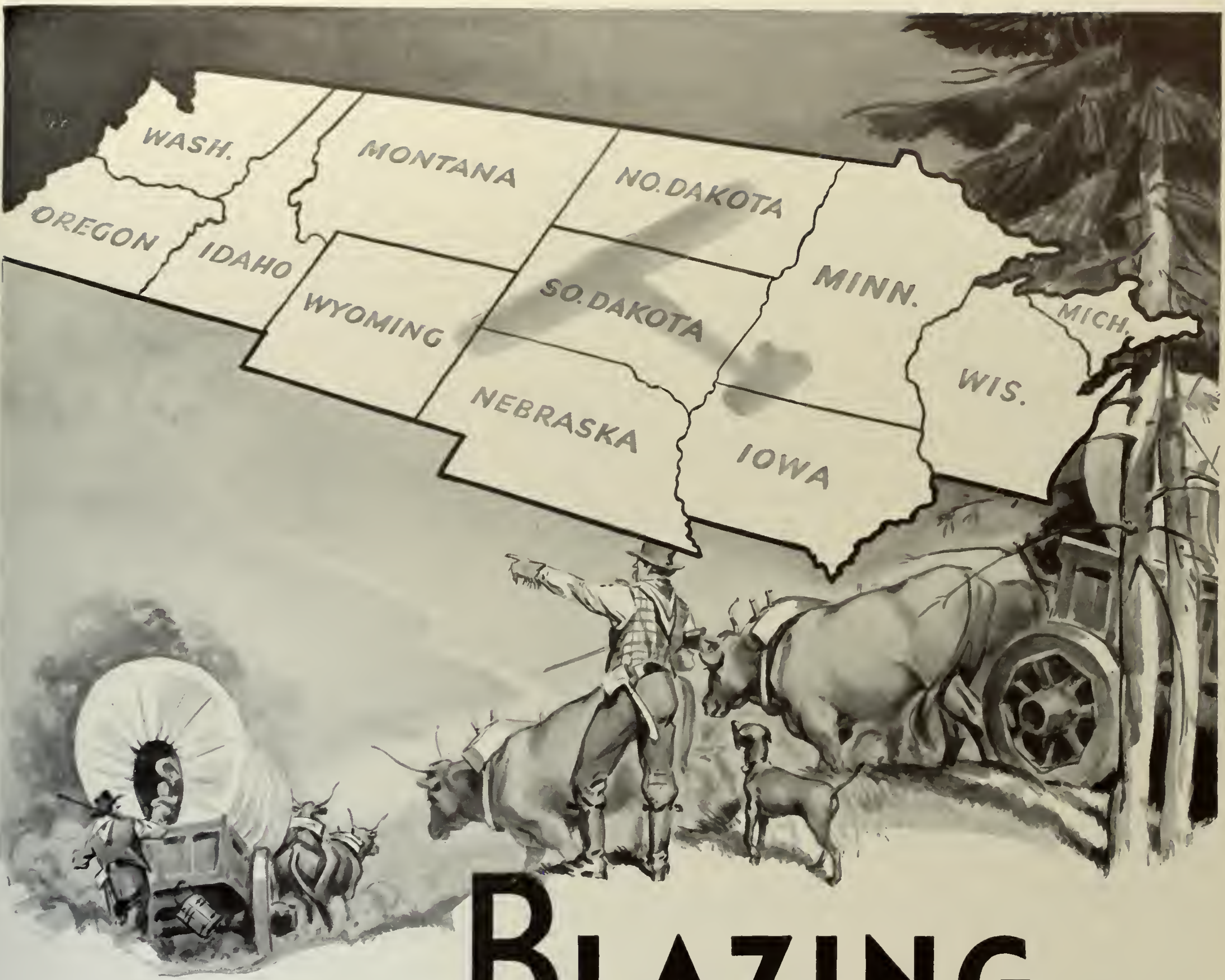
Mr. J. Malnati, maitre d'hotel and assistant manager of the Biltmore, has under him all restaurants, dining rooms, and is in charge of all banquets and social functions. He comes from an illustrious Italian family of culinary wizards, and wears the cross of the household of the King of Belgium. He went abroad with Seres, who is French, on both his trips and won his Belgian decoration in his service to King Albert and Queen Elizabeth. He is fluent in languages, highly educated and has traveled all over Europe. The culinary department of the Biltmore is under his jurisdiction, and he makes subways and ships and circuses out of the dining rooms on call. Malnati has conquered the problems which bobbed up with prohibition. He studies his men and women diners; he knows them.

He knows that former Governor Alfred E. Smith would rather have for himself Boston scrod and chocolate cake than anything else; that Sir Thomas Lipton lets his secretary do all his ordering when it comes to meals; that two broiled lobsters are to be sent with the seven truckloads that go to the United Hunts Meet at Belmont Park, for which the Biltmore has been caterer for years; because there are always two gentlemen who will want them.

Having decided what he will feed to his guest, Mr. Malnati orders it through his steward from Punderford Company, a supply firm which does the purchasing for many hotels, lending efficiency to economy, and satisfaction as well. On an

ON AN AVERAGE DAY THE BILTMORE BUYS 1,200 POUNDS OF FOWL, 60 PAIRS OF GAME BIRDS

BURLINGAME PUBLIC



BLAZING

a new financial trail

TODAY banking leaders of the Middle Northwest are blazing a new financial trail over a territory where only a few short years ago hardy pioneers were blazing more primitive trails. Covered wagons have given way to airplanes, group banking is taking the place of struggling individual banks, and inadequate financing has been changed into financial independence.

The Northwest Bancorporation, formed less than a year ago for the purpose of combining into one central organization the strong banks in key cities throughout the Middle Northwest, has proved its soundness and popularity. Its leadership in this modern banking trend has been established. Affiliated banks and trust companies have increased from 8 to 84, and total resources have mounted from $160,000,000 to $465,000,000.

As much a pioneer in modern banking as the covered wagon pioneers were in settling new country, the Northwest Bancorporation is blazing a new financial trail that leads to greater financial stability and independence for the Middle Northwest.

BURLINGAME
PUBLIC
LIB.

A GREAT BANKING INSTITUTION

NORTHWEST BANCORPORATION

COMBINED RESOURCES OVER $465,000,000

MINNEAPOLIS, MINNESOTA

Where *Values* Grow!

It is fitting that an announcement by BARRON'S, *The National Financial Weekly*, should appear in the first issue of a magazine that "deals with the factors which control the fortunes of every man."

¶ In a world that has become aware of the heroics and high excitements of business . . . Fortune will touch industry with the spirit of literature and art. BARRON'S will continue to deal with the grim realities of that same world. It will remain on the firing line . . . a reporter of that interplay of forces out of which values grow.

¶ Unless values grow, there cannot be leisure; without leisure there cannot be literature and art. As Will Durant puts it:

> *"Art can only be the flower that grows out of wealth. . . . The Medici came before Michelangelo."*

Since wealth is the handmaid of art, the fitness of things demands that BARRON'S be present when Fortune enters to give distinction to the record of industrial life.

¶ Business and finance are no longer local. There is no splendid isolation for investors, no escape from foreign entanglements — every economic factor in every land enters directly or indirectly into the investor's calculations of values.

¶ That is why BARRON'S has eyes and ears wherever values grow. Its newsgathering equipment is world-wide, embracing the facilities of the Dow-Jones Electric Ticker Service, The Wall Street Journal, the Boston News Bureau, and the Philadelphia Financial Journal, the world's most important financial news organization.

¶ BARRON'S is more than a financial weekly. It is a financial service of exceptionally high quality; even more important than the practical help that it gives to investors, is the knowledge of investment principles and practice that comes from a week-by-week reading of its pages.

A specimen copy of BARRON'S *will be sent on request. To make the introduction to* BARRON'S *complete, there will be included with the specimen copy two booklets, "Ten Rules for Investors" and "How to Get the Most Out of Barron's," both of which have proved highly serviceable as aids in the accumulation of values.*

BARRON'S

The National Financial Weekly

44 Broad Street, New York City

C. W. BARRON
Founder

HUGH BANCROFT
Publisher

average day the steward might order, in part, as follows:

Meat	2,000 pounds
Butter	600 pounds
Fowls	1,200 pounds
Eggs	270 dozen
Milk	800 quarts
Game birds . . .	60 pairs
Flour for bread . .	4 barrels
Oysters	7 barrels
Oranges and grapefruit	12 cases
Apples and pears .	6 cases
Miscellaneous fruit .	6 cases
Vegetables . . .	20 barrels

Chef Seres receives this consignment with his menu from Mr. Malnati, after it has been inventoried, inspected and accepted by the steward. The latter has also to supply 3,000 meals a day for the employes of the Biltmore. The Seres kitchen takes up an entire floor of the Biltmore, and it is quite filled when the illustrious chef adorns himself with his flowing apron and his wonderful cook's hat. The four principal soups are his chief care; the rest are tasted by an assistant. Signs mark each section and tell each waiter what to expect in its domain. In one section half a dozen women shell peas and separate broccoli. In another little corner four men open clams and oysters. Overhead is the bakery where they are turning out, among other things, seven thousand rolls a day. Here are four soup vats, each holding 100 gallons. Upon the 23rd floor is Mike, the tinsmith, mending pots as he learned to mend them in Vilna, 25 years ago.

A public utility

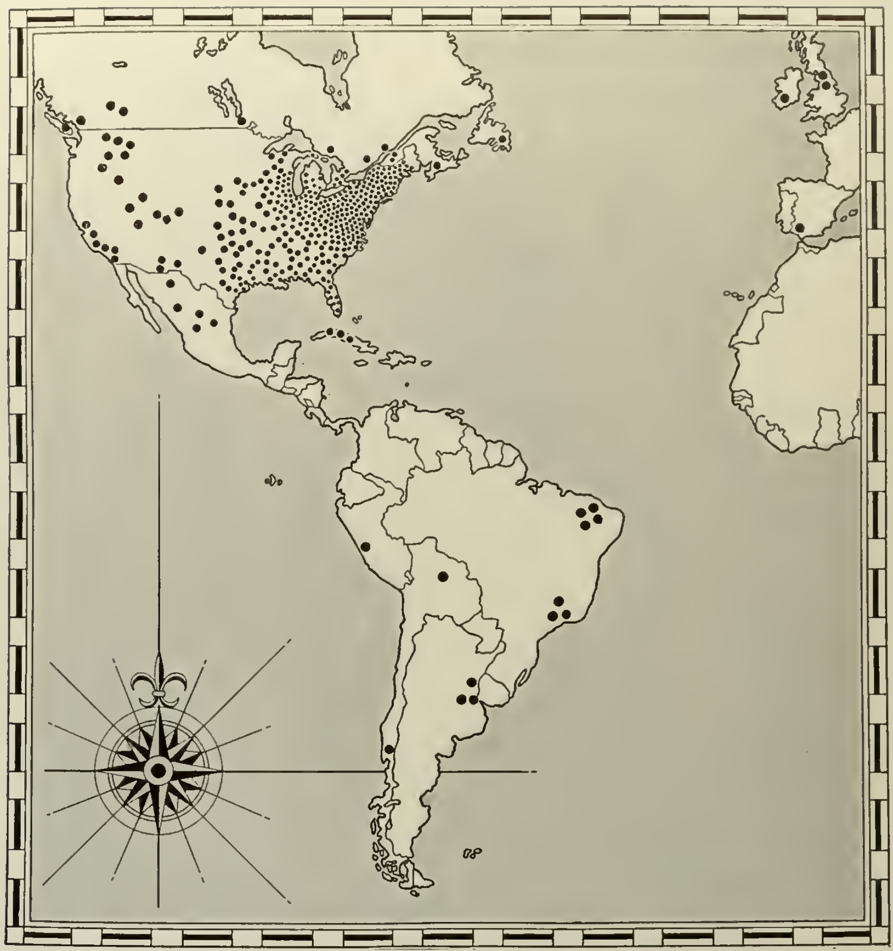
The hotel in this age has grown into a public utility. In nearly everyone's life, at one time or another, it becomes his only available home, where bed and board, life's two prime necessities, may be obtained. Mr. E. J. Stevens, Vice President and General Manager of the La Salle Hotel, Chicago, gives the following description of his hostelry. "Among other necessary activities we operate a power plant and lighting plant of sufficient size to serve a city of 25,000 population; manufacture twenty tons of ice a day. We operate an extensive cooling and air-conditioning plant; manufacture carpets, draperies and furniture; operate a large carpenter shop for repairs and renewals of equipment. We have a comprehensive auditing, accounting and controlling system in charge of expert accountants; department of painting and interior decorating; a department devoted to buying, handling and caring for linens. We store and use cream, butter and various other foods, oil, coal and have a chemist who analyzes milk, etc. We have an ice-cream factory; a candy store; bread baking machinery; a mattress and pillow-making department; medical department and hospital; printing office; drug store; information bureau; cigar store; cabinet shop; police department; florist shop; a fully equipped tailor shop; a plant for lacquering, nickeling and refinishing bathroom fixtures and lighting fixtures; and a large garage and an automobile repair shop for the care of our guests' automobiles, along with all the other usual departments found in a hotel. There has just recently been completed on the roof of the hotel a powerful radio broadcasting station."

The investment in hotel properties throughout the United States and Canada was estimated by *Hotel Management* at $5,024,000,000 in 1928 and $6,000,000,000 in 1929. The Hotel Biltmore represents a value of $1,500,000 in equipment and fixtures, roughly $9,000,000 in land, $7,000,000 in building—a total of $17,500,000. Its present favorable return on investment is the result of slow growth out of deficits and represents far better than average results.

Beneath the profits of the Biltmore reaping its indirect share of the hotel business at its terminal is the New York Central Railroad, which owns the following list of hotel sites, in some cases having an interest in buildings as well:

Site	*Approximate Value of Site and Building*
The Biltmore . . .	$16,000,000
The Commodore . .	20,000,000
The Roosevelt . . .	13,000,000
The New Waldorf Astoria	40,000,000
The Chatham . . .	2,250,000
The Park Lane . . .	6,000,000
Yale Club	2,200,000
Marguery	4,700,000
The Barclay	7,000,000
Pierre's	6,500,000
Sherry's	6,850,000
Total	$124,500,000

The Central receives most of its share regardless of management. But nevertheless, the Central income from its hotel properties and the maintenance of the value of the national investment of $6,000,000,000 in hotels is dependent in the last analysis on successful management, reporting net profits on a large or small scale, after the manner of the Biltmore.



The dots on this map show the hundreds of places where we have done engineering or construction work. They are an indication of our wide knowledge of labor and material markets and long experience in building under the varying conditions obtaining in different sections of the United States and other parts of the world.

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....*represented by a billion dollars worth of work*

THE example of President Hoover in pushing the immediate construction of great public works is being followed by manufacturers, railroads, public utilities and institutions everywhere.

New facilities—shops, factory extensions, railway terminals, power developments, electrification, foreign branch plants—are being immediately projected.

In connection with this national building program the services of this company are available to American industry.

Our experience is indicated by a billion dollars worth of work performed for 1200 clients located in practically every state in the Union, seven Canadian provinces and 12 foreign countries.

Through our offices strategically placed in five principal cities in this country, and through our three foreign companies, we are prepared to handle construction undertakings anywhere in the world.

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The Growth
of American Business
1904-1929

is the title of a survey we have made of recent business history . . . It is brief and conclusive and points to the trend of general business in the future.

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Chicago Budget

(*Continued from page 118*)

the host's dinner costs as much as that of one of his guests. That was an average of thirteen per month, which is not many. Thus our dinners cost us $312.

Some of the dinners precede a theatre, others a Subscription Ball. If we have four theatre parties a year with six persons in each, and tickets cost $4.40 each, we spend $105.60 on the theatre. Subscriptions to the Assemblies, the Bachelors, and Benedicts, and the Twelfth Night Ball come to $50.

Finally, under this general category of Good Will we allow $500 for liquor and tobacco. As I said, we have to practice economies, but less than $300 for liquor (domestic gin at $30 a case; Bourbon at $80) and $200 for tobacco are not among them. When my income is thus so nearly exhausted, I might well blush at this item, but *au contraire*, I like my environment, and admit that to this degree, I am subject to it. Perhaps this item will not appear on my son's budget when it comes his turn to earn and spend; but, as for me, I am not prepared to delete it.

If you will now refer finally to the chart you will discover that we have just $1,000 left.

Now comes the item of emergencies *or* luxuries. Definitely, they are alternatives, when both have to be covered by $1,000.

Anne and I naturally coöperate on the question of luxuries. If I want to go East to my college reunion, she gives up the Kentucky Derby. If she has her heart set on her trip to New York, I forego my duck hunt, which I took this fall. Both of us agree that the kids ought to be taken out of town during the summer. We can rent a house in Lake Forest for anything from $800, but this is a gilt-edged community, and it's just as pleasant to stay at one of the more distant resorts, where I can join them over the weekends.

Obviously, almost none of these things can be done on the $1000 which remains available. Practically what happens is that by June we must go right back to the beginning of the budget and draw upon that $2500 for savings which now looks gigantic. Then, why all this budgeting if savings—Article One of Faith—is to be renounced? The reason is that Anne and I have always provided for "savings" and it has been precisely by spending those savings that we have come to the end of each year happy—and solvent. And now, dear Father, with my $5000 raise in salary, we are really hoping that this year's savings will be quite permanently added to the capital account.

Markets

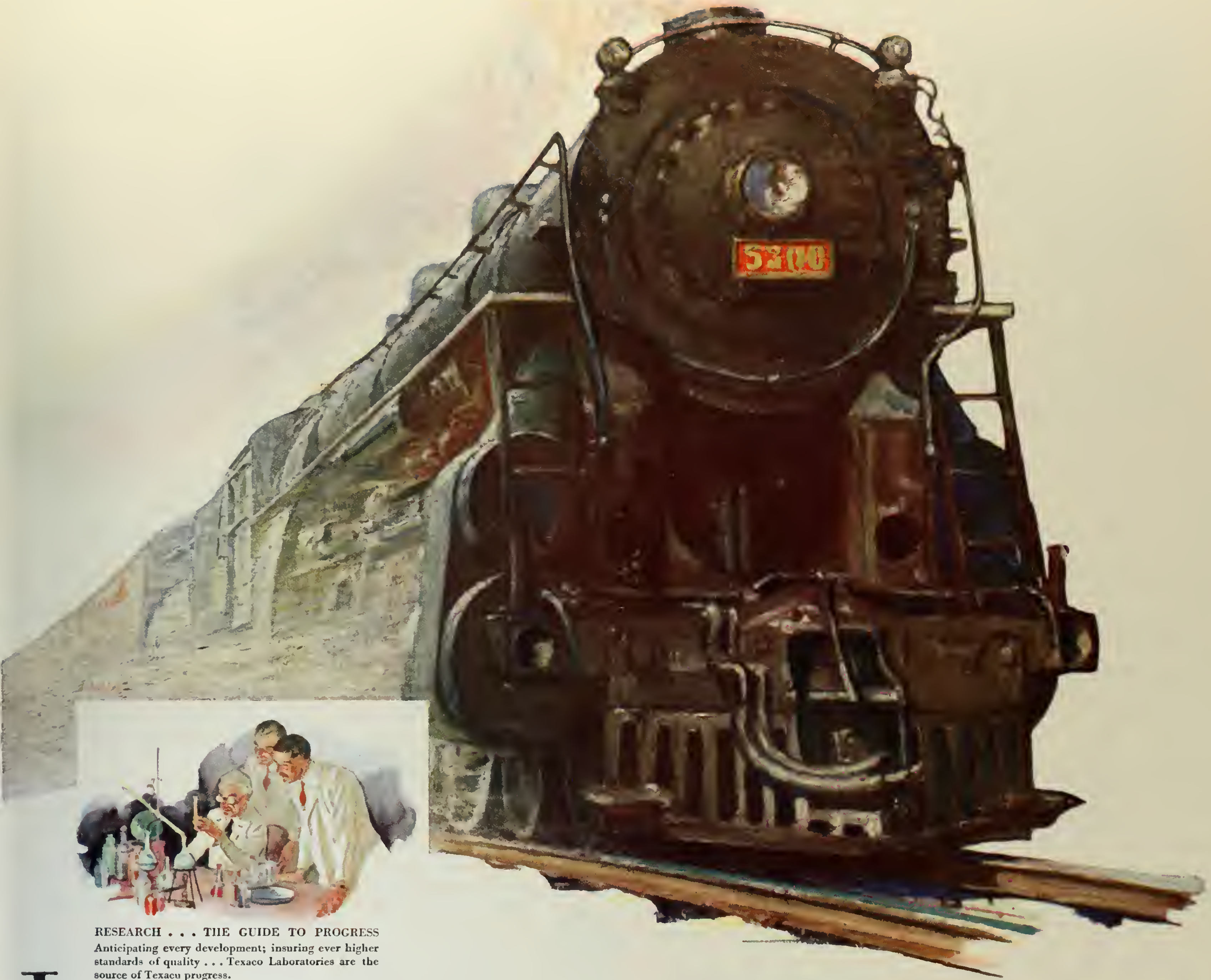
(*Continued from page 109*)

best known to Bonbright customers.

Landon Ketchum Thorne is a graduate of Yale's Sheffield Scientific School (Class of 1910). At Yale he was a Y.M.C.A. secretary, rowed on a freshman eight and a Varsity four, and was cousin of Brink Thorne, captain of Yale's 1896 eleven. After graduation he sold bonds, was, in 1916, head of Bonbright & Co.'s salesmen. Today he belongs to many clubs. Manhattan sporting columns have reported him as head of a syndicate of yachting enthusiasts who will build one of the four yachts that next summer will compete for the honor of defending the America's Cup against the challenge of Sir Thomas Lipton.

Alfred Lee Loomis is also a Yale graduate; is less typical in his private life. He is, for example, an expert performer of sleight-of-hand tricks. Most magical, however, is his Tuxedo Park laboratory, where, with electrical apparatus not dissimilar to that employed in a radio broadcasting station, he has produced sound waves which vibrate far too rapidly for the human ear's perception. These silent sounds will burn fingers and kill insects. They have also the faculty of breaking down blood vessels, will therefore produce fatal results when used on rats and other warm-blooded animals. Apart from his interest in supersonic "death rays," however, Mr. Loomis has followed a not unusual career. After graduation from Yale, he studied law at Harvard, then entered the firm of Winthrop and Stimson (now Winthrop, Stimson, Putnam & Roberts, with the second partner currently engaged as U. S. Secretary of State). In 1911 Miss Julia Loomis became Mrs. Landon Ketchum Thorne. In 1919 Mr. Loomis joined Bonbright & Co. and in 1920 participated with Mr. Thorne in the deal by which the Bonbrights vanished from Bonbright.

Not to be ignored in the Bonbright decor is the women's bond sales department, presided over by Mrs. Jacob A. Riis, widow of the philanthropist, pioneer in training women salesmen. Notably successful, she nonetheless cautions ambitious applicants: "A woman must be 10% better than a man to achieve the same results in selling."



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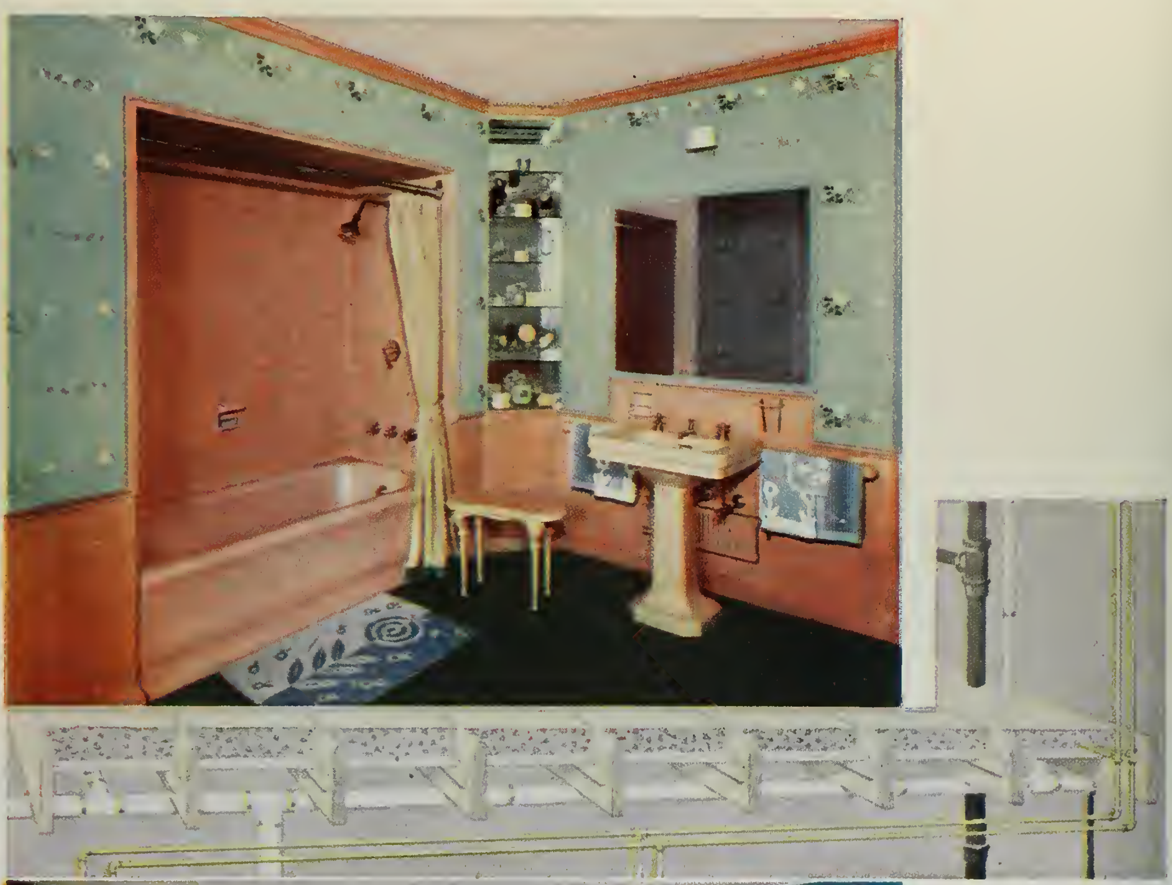

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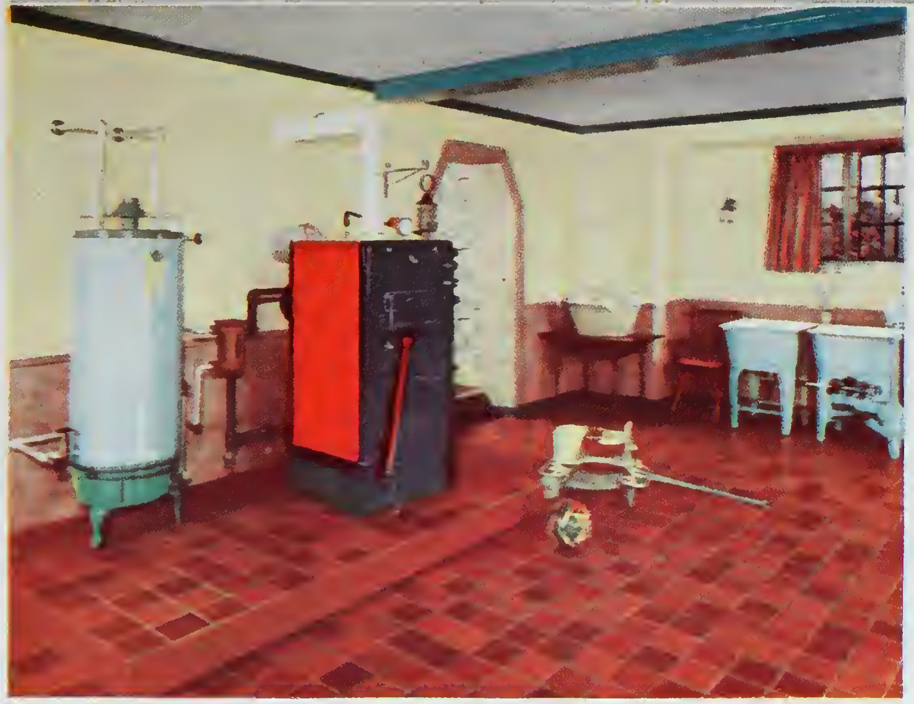

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WINSTON-SALEM
YOUNGSTOWN

Banking—Group and Branch

(*Continued from page 140*)

factions, the greatest is safety. Ardent is our faith in the doctrine that if a bank is big enough it *cannot* fail. Into this doctrine we shall pry anon, for it is Article I of the Creed Branch Bankers. Here we need only record that it is a doctrine which the public easily espouses and hence size places a bank in a strong competitive position. The quality of a bank's assets is more important than their amount, but the public can scarcely judge the quality. And here we may conclude: there are good and sufficient reasons why banks should merge; in the last two years they most emphatically and speedily have. In New York City's long history before 1900 there were exactly 9 bank mergers. In the first quarter of this century there were 147. In the four years 1925-28 there were 55. In the first nine months of 1929 there were 30. So that, whereas in 1889 the 10 largest banks held one-third of the banking resources of the city, on Jan. 1, 1929, the ten largest held two-thirds. And on Sept. 1, 1929, they held 72%. In New Orleans, 3 banks have 85% of all deposits. And throughout the nation, 3% of all the banks have 64% of all the money. Of course this does not begin to be a monopoly, because 3% of all banks means some 700 separate banks. Or, whereas the biggest steel company accounts for 40% of all steel and Henry Ford for almost 50% of all autos, our present biggest bank holds less than 3% of all U.S. banking resources.

Coincident with this swelling of bank sizes, there has been a drift from the National System—banks which are under Federal Charter and supervision rather than State. Banks in the National System in October 1928 numbered 7,676 with resources of $29,025,480,000, in July 1929 had decreased 203 in number, $1,001,170,000 in resources. Since membership in the Federal Reserve is compulsory to National banks, voluntary to State ones, fewer national banks mean a theoretically weaker Federal Reserve system. But to date, the Federal Reserve System has not decreased in size, and, in the opinion of Governor Young, the bigger and more-branched banks become, the greater becomes the desirability of the Federal Reserve. Chief of the reasons behind the drift is confusion regarding National banks merging with trust companies as exemplified in the Worcester Case (on which is a note at the end of this review).

The Question; The Determinant

The question before us is: shall the Federal banking laws (and the State laws similarly prohibitive) be amended so as to permit Branch Banking, if not nation-wide at least throughout considerable areas similar to Federal Reserve districts? At the same time, shall the recent phenomena of Group Banking be given at least a tacit approval? Or, on the contrary, shall steps be taken to prohibit or interfere with Group Banking except within such areas as Branch Banking may be permitted (which, if the areas should not be extended, would practically eliminate Group Banking)?

It is already clear why this question demands answer. Everywhere, in response to apparently sound economic forces, bigger and bigger banks have been formed which could be nuclei of branch systems even though many have now no desire to be.

Everywhere separate banks at a distance from each other are uniting in groups and logic would seem to indicate that in most cases the group is only halfway-house to Bank with Branches. And, in California, most prosperous of states, we have a potent functioning example of branch banking which challenges comparisons throughout the U.S. Added to all of which we note in the eye of this and that banker the glint which says, "Having satisfied the urge to merge, now I crave to branch."

The question to be decided is a public question. The determinant is, therefore, the public weal. If each and every one of the 1,000 biggest banks craved to branch (many sincerely disclaim such a desire) and if they would all make money by so doing—that, in itself, would be no argument. We ask only: is it for the public weal? And only to the extent that greater bank profits make for better banks for you and me is the bigger-profit argument admissible.

With respect to the production and distribution of automobiles, we assume that Messrs. Ford, Sloan, Chrysler, Nash, *et al.*, best serve the public when best they serve themselves. That, it appears, we do not assume in the case of bankers. With respect to the distri-

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It was early evening. A long night stretched still and far 'til morning. A bitter winter wind shrilled and whistled and stung. His rumpled and warm bed beckoned . . . and he hurried and he smiled and he called his floor and he locked his door and he sung and sang and made his room look like home and he piled his clothes in disarray and he sank with a grin into great and comforting billows of warm and woolly blankets to rest and *read.* And *he slept* . . . and in his dreams . . . he sauntered again into the offices of the men who could purchase the things he came to Detroit to sell and *he sold* all night long. And in the morning . . . rested, hungry, fit and fine, he cracks an exultant towel at another sunny day. See you soon. *Good night.*

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bution of food and a thousand and one other things we let Woolworth, Kresge, A. & P., Montgomery Ward, *et al.*, go as far as they like—on the assumption that only that which pays us pays them. But bankers—no! What a bank makes is not, for us, adequate evidence of its merits. And the bankers are the first to applaud our inquisitorial attitude. For a banker knows what his customer rarely considers, that he is not a businessman in the ordinary sense. He deals in no commodity. Only incidentally does he deal in the money in his vault. He deals almost entirely in professional opinion—for credit arises from opinion. He gives, as Mr. George W. Davison says, a buying power to the credit of his customers based on his *judgment* of their character and resources. Certainly the banker cannot create credit as Keller could pull rabbits out of a hat. Certainly credit is limited by a bank's reserves—and in that is a sort of commodity. A bank's "profits" differ radically from a lawyer's or doctor's fees; they also differ from the price obtained by merchant or manufacturer. Thus it is that between banks, while the competition in rates of loans and foreign exchange causes bankers to vie over 1/8c and 1/64c, the chief competition is in service and prestige. The banker, in short, is at least a semi-professional and must therefore be surrounded by the safeguards necessary to keep professions pure. Just as states license doctors, so they supervise bankers, and if the state seems more concerned with bankers than with doctors that is only a commentary on the relative importance which people place upon their money and their lives.

The Debate

Ordinarily the burden of proof is upon those who advocate a change. But Branch Bankers are able to state that in the last decade, a decade of amazing prosperity, 5,000 banks failed (*circa* one in every five banks in the U.S.), tying up deposits of $1,500,000,000. If we added to the 5,000 banks that have actually failed in the U.S. in the last decade, the number that have been "taken over" on eve of failure, our statistic would be even more appalling as to jeopardized deposits and capital lost. Even now, the big Groups are finding that some of the little banks they investigate with a view to acquiring are in an extremely frigid, if not frozen condition. Most of the failures occurred in regions which were not prosperous; but all occurred within the confines of the sovereign United States which reeked with prosperity. In the great Bull year of 1929 there failed, before the stock market crash, 63 Federal Reserve member and 408 non-member banks. This, of course, raises a presumption of doubt against the present system, and we shall, therefore, first review what the opponents of change can say in favor of the present system.

First of all, they meet this damaging evidence of bank failures by admitting that evils exist. Many banks, they say, have been established at crossroads where authorities should never have permitted a bank to be. Similarly many banks start business with inadequate capital. Possibly no bank should be born with less than $100,000, whereas many states permit birth on such ridiculous capital as $25,000 or even $10,000. Six percent per annum on $25,000 is $1,500—and since that trifle is likely to represent the bank's profit it is obvious that the salaries paid to the necessary staff to produce the profit are apt to be microscopic. Of course many country bankers take a salary as well as profit from the bank and also make something on the side. Nevertheless, there are undoubtedly too many small banks, and as communications develop constantly fewer are necessary: therefore, let the uneconomic bank transfer, as soon as possible, all its assets to the nearest good bank; let no more shoestring banks be started, and when a bad situation is thus rectified let us join with Mr. Davison in saying that all the damage to date is "a trifling price to pay for the values inherent in and benefits derived from our individualistic banking". So say the opponents of basic change, and it should probably be agreed that they partially meet the most alarming indictment of the present system. For this, really, is quite as much an indictment of how the system has been managed as of the system itself. When Louis XVI ascended France's throne, autocracy was probably doomed, being unsuited to the inevitable future; but in France autocracy fell before an attack upon its management rather than because of its essential inadequacy. Where autocratic management was good, as years later in Germany, it survived until it made one big mistake. So, if we ask banking authorities to be more intelligent and strict and if we extend the principles of Clearing House supervision, we can justly envision a continuance of the present system without its recent disgraceful record of bank

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THE CITIZENS KNOWS ITS MARKET

failures in the United States.

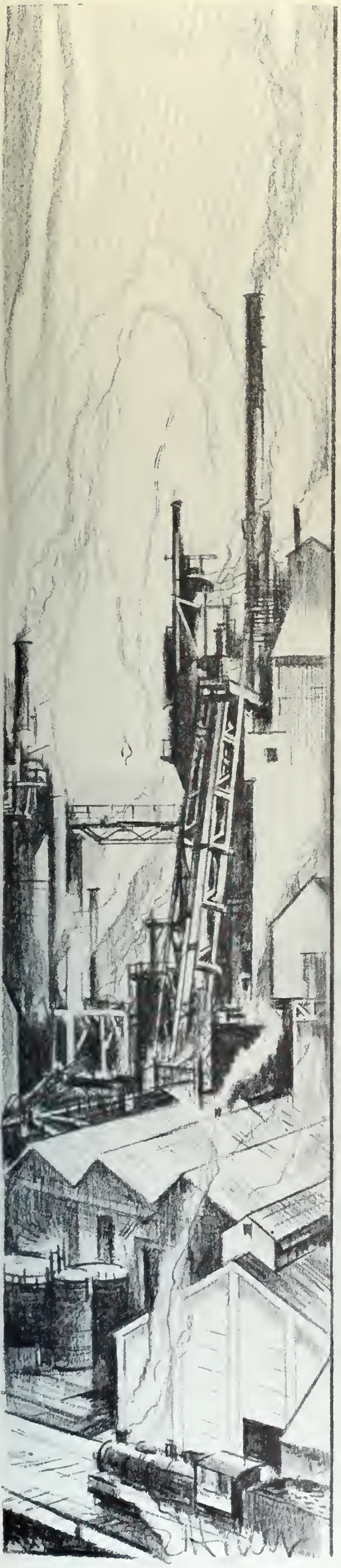
To these arguments, the Branch Banker answers that elimination of these small banks would close three out of every four banks in the U.S. and deprive thousands of communities of banking service. To remedy the situation he points out that a Branch Office is perhaps a better nomenclature than a Branch Bank, that whereas a community cannot support even the tiniest of banks, it can well support an office whose function is only to pay and receive, ordering other services from the home office only as needed. For examples of what little business is required to keep an "office" profitable, the Branch Banker can point to England where small towns have branch offices that are open two, perhaps three days a week.

Aside from inadequate capitalization, the chief causes of bank failures have been local economic catastrophes such as the Fruit Fly in Florida. Concerning this, Anti-branch-bankers say two things: 1) No banking system can prevent flies; 2) Assuming that the banking (i.e. extension of credit) prior to the catastrophe has been good banking, the losses will be just as great under one system as another. But here, of course, the Anti-branch-banking position is weak. The damage done by the fly to crops is one thing; but it is another and worse thing if the fly not only ruins oranges but closes banks. With equal losses, an independent Florida bank might have to close, where the Florida branch of a large Atlanta or New York bank would not have to close. An actual case in point was the failure of unit banks in Macon, Ga., while the branch of the Citizens & Southern not only kept open but gained materially. Right here is where Branch Banking is most likely to win the debate insofar as what might be called "tangible arguments" are concerned.

We have previously said that Anti-branch-bankers had successfully met the serious indictment that the present system permits too many bank failures. Now we shall have to revise that statement. We shall have to say that they have quashed the indictment so far as a large percentage of failures is concerned—they have taken the alarm out of that dreadful statistic: "5,000 failures". But they have not proved that their system is the best possible system for *real emergencies*. All the banks in Florida might have been capitalized at over $100,000; all might have been as well managed and supervised as is reasonable to expect, but still some of them would almost certainly have failed in 1929. On the contrary, it is by no means certain that there would have been any failures if, to take an extreme example, all banks in Florida had been branches of some 20 large institutions. No areas in the world have suffered more economically than some British coal mining districts, and during the decade in which the U. S. had 5,000 failures, England had not one single one. While 5,000 banks were failing in the U. S., only 28 in California had to close.

Thus, even if Branch Banking cannot lessen one set of losses (and perhaps it can) it can certainly lessen a secondary and sometimes bigger set of losses arising from such general breakdown as occurs when banks close doors. Thus we can say that Branch Banking has tentatively established its case *by showing its theoretical superiority as a system for meeting emergencies*, which is certainly a fair test for any system.

Having done so, we shall proceed to knock the theory into a complete state of dejection by stating that huge Branch Banking systems have, as a matter of fact, failed and failed with an economic thunderclap. In 1922, Italy and the sophisticated world was scandalized by the collapse of the Banca Italiana di Sconto which had 190 branches throughout the Kingdom and a prestige even greater than that of its chief, Angelo di Pogliani. If Italy was rotten, then consider that in 1893 (year of the end of the credit inflation) no less than 13 Branch Banking systems failed with $500,000,000 of deposits in that brisk rising continent of Australia. If Australia was raw then consider that in South Africa where white civilization is old, and which was a sort of godmother to the whole Branch Banking idea, it was only the government which in 1865 prevented a collapse of just about the whole financial structure. If South Africa is too distant, we come to Canada. Reluctant as they are to preach a sad lesson with so friendly a neighbor as their text, the Anti-branch-bankers find in Canada their most vivid argument. As we shall see below, they partially and perhaps inaccurately attribute Canada's relative backwardness to the fact that it has had to grow up under the Branch Banking system instead of under our virile local unit system. But, more than that, they are able to report that in 1923 the Home Bank of Canada with 78 branches failed and that in 1922 the Merchants Bank of Canada with 400 branches was only saved by painful absorption into another



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bank. So, of course, it is absurd to believe, as one might believe after a session with a particularly rhetorical Branch Banker, that if a bank is big enough it *cannot* fail. Nevertheless, in spite of all this, we must still subscribe to the theory that a Branch Banking system offers the greatest safeguards against regional financial catastrophe. And, theory aside, the huger the bank the nearer its safety can approximate the safety of the country in which it exists. (Fortunately, this review does not have to consider a world Branch Banking system.) Practically, this means that the greatest resources of the country are apt to be rushed to the aid of a bank if it is huge enough—as, for example, in the case of the Merchants Bank of Canada, in which no depositor lost money, so that its case is scarcely an argument against Branch Banking.

Here it must be repeated that there is no present question of nation-wide Branch Banking in the U. S. Some Branch Bankers may dream of it, and Mr. Giannini may demand it, but all they expect soon is regional Branch Banking—so that a bank may, for example, have branches throughout some such wide area as the Federal Reserve District in which it is located. And of course all bankers naturally detest revolution (except possibly in Central America) so that all agree that whereas a revolution is now occurring there must be nothing revolutionary about the revolution. What is going on in various forms is concentration of financial control. Quite aside from the manner of concentration there is something very grave to be considered: while concentration in many cases takes the sting out of liquidation, sometimes it festers without removing the sting so that a nation, to change our medical terms, gets pneumonia instead of just having a good sneeze. The classic example is Japan. To quote that learned economist, Mr. Benjamin M. Anderson Jr. of the Chase Bank:

> In the crisis of 1920-21, our many thousands of independent banks, by cooperative effort and by resort to the aid of the Federal Reserve Banks, were able to prevent the crisis from degenerating into a panic, and were able to go through the liquidation in an orderly manner . . .
>
> The business tide turned in the third quarter of 1921, and the year 1922 was a year of strong recovery. In Japan, on the other hand, concerted action by a few great banks, a few great industries, and the Japanese government, choked off the crisis and the liquidation early in 1920, and the stale position, unliquidated, was carried over, despite a partial liquidation at the time of the earthquake in 1923, until the great crisis in 1927, when some great banks went under. Japan endured seven years of business stagnation in the vain effort to avert losses which our system of banking compelled us to take in 1920 and 1921. And Japan is not the only country where banking concentration has unduly delayed necessary liquidation. When many thousands of independent banks must independently meet their obligations at the Clearing House every day, it is impossible to carry economic mistakes anything like so far as is possible when only a few great banks dominate the picture.

Incidentally, Mr. Anderson does not reveal his net opinion on the subject, merely urging caution in a development which he recognizes as valid in many instances.

Because of that Florida argument, the Branch Bankers still have the best of the debate. As indicated, they can surmount the difficulties raised by examples of Canadian and other failures, and they can assure us that we can have Branch Banking without any such concentrated domination as in Japan or some European countries.

But the great and profoundly appealing argument of the Anti-branch-bankers is yet to come—the argument of Individualism vs. Regimentation. However, before we get to that we must briefly recite some points, which, though minor, are extremely pertinent to the whole situation.

We have first to note that banking has become extremely complex and has long since exceeded the old boundaries of regular banking. The General Motors Acceptance Corp. which finances your purchase of Cadillac or Chevrolet, is doing a banking business—doing it in all 48 states of the Union. The aforementioned Chase National, no loud proponent of branch banking, owns the American Express Co., which, as everyone knows, no longer carries trunks on its back, but does issue travelers' checks and will soon open its own trust company. Though you should buy such a check in Oskaloosa, it is Mr. Wiggin at 18 Pine Street, New York, who is promptly in command of your

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money. Building and loan societies, the ubiquitous Morris Plan Banks, and such multi-branched investment bankers as Lee Higginson & Co. with its 37 offices and Brown Brothers, are all interstate banks. Even the mail order companies, through financing by deferred payments, may be classed as doing a banking business that is not halted by state boundaries. Dozens of other instances of what are practical forms of nation-wide banking could be cited—the only regulation against interstate banking is in the case of those corporations which are unfortunately chartered for the purpose of doing a banking business.

All of this comes most directly into the argument under the heading of Service which has already been mentioned in connection with bank mergers. But many a bank which merged momentously in order to serve its City with branches sees no reason for extending the process into small city or country branches. The argument is that all that can be done by wide-area Branch Banking can be done by correspondent banking. Not only can the county bank refer its client to its big city correspondent for such services as it cannot render itself, but it can actually render these services through its correspondents. To take a minute example, tickets to Timbuctoo or a prize fight: the theory is that the big city bank is so anxious to please the President of Hillbilly Savings Bank that it will get tickets for the President's friends with just as much as, if not more, alacrity than for the customer of its own Hillbilly branch. And if this is not the case, then let it be the case. Big Anti-branch-bankers are saying to their little correspondents: Ask and ye shall receive. They are encouraging little banks to increase their prestige by printing on their letterheads the great name of their big correspondent. Mr. Davison even toys with the peculiar suggestion that there should be committees of independent bankers all corresponding with the same metropolitan bank which would act as "clearing house for ideas". And of course the right hand of advice in making loans or establishing trust departments is freely offered.

Tut, tut, says the Branch Banker, do not evade the issue by creating a Mr. Tweedledum in the image of Mr. Tweedledee. The simple fact is that times have changed. It is no longer enough that the smalltown man should have friends in the big city: the whole great big city with its globe-girdling relations must come to the small town—must come in banking, as it has come in movies, style, news, tempo, power.

The Branch Bankers go further. Confident that the tide of events is justifying their thesis, they assert that Anti-branch-bankers do not speak with real conviction based on a study of the facts. The entire Anti-branch-bank argument, they say, is simply an attempt to rationalize the *status quo*. Bankers who have succeeded under the present rules are, for personal reasons, loath to encounter the hazards of change. Evolution may be the law of life, but it is characteristic of human beings to resist it—therefore evolution occurs only under stress and strain and usually with pain. Meanwhile, big bankers who oppose this evolution are accused of an insincere effort to curry favor with the little independents.

However, this merciless undermining of the Anti-branch-bank position is calculated to enrage many an Anti-branch-banker. For the Antis believe that they are fighting for a great cause—Individualism. Speakers at last year's American Bankers Association meeting rose to heights of eloquence, with honors to Vice President Max Nahm of Bowling Green. Ky., whose peroration was:

> In the smaller towns, the scheme of life is not complete without the local unit banker; men like Callie Harris in the town of Franklin, Kentucky. Benign-faced, with a smile for everyone, an optimist in all emergencies, family and business, adviser to every patron or friend, trustee of every church or hospital loan, executor when men died—dedicating their souls to God, and their estates to the banker. He befriended a poor foreign peddler with his pack on his back, nursed him from death's door back to health. This peddler became a great and successful merchant and when he died, his will gratefully gave his large estate to this banker. When Mr. Harris was buried, nearly every man, woman and child in his county came to drop a flower on his red clay grave. Replace such a man by a city clerk awaiting every morning a circular letter, or his master's voice out of a loud speaker's horn? God forbid.

It is on this Rock of Individualism that Anti-branch-bankers ultimately take their stand defying all comers. It is a noble position and

[*Continued on page 178*]

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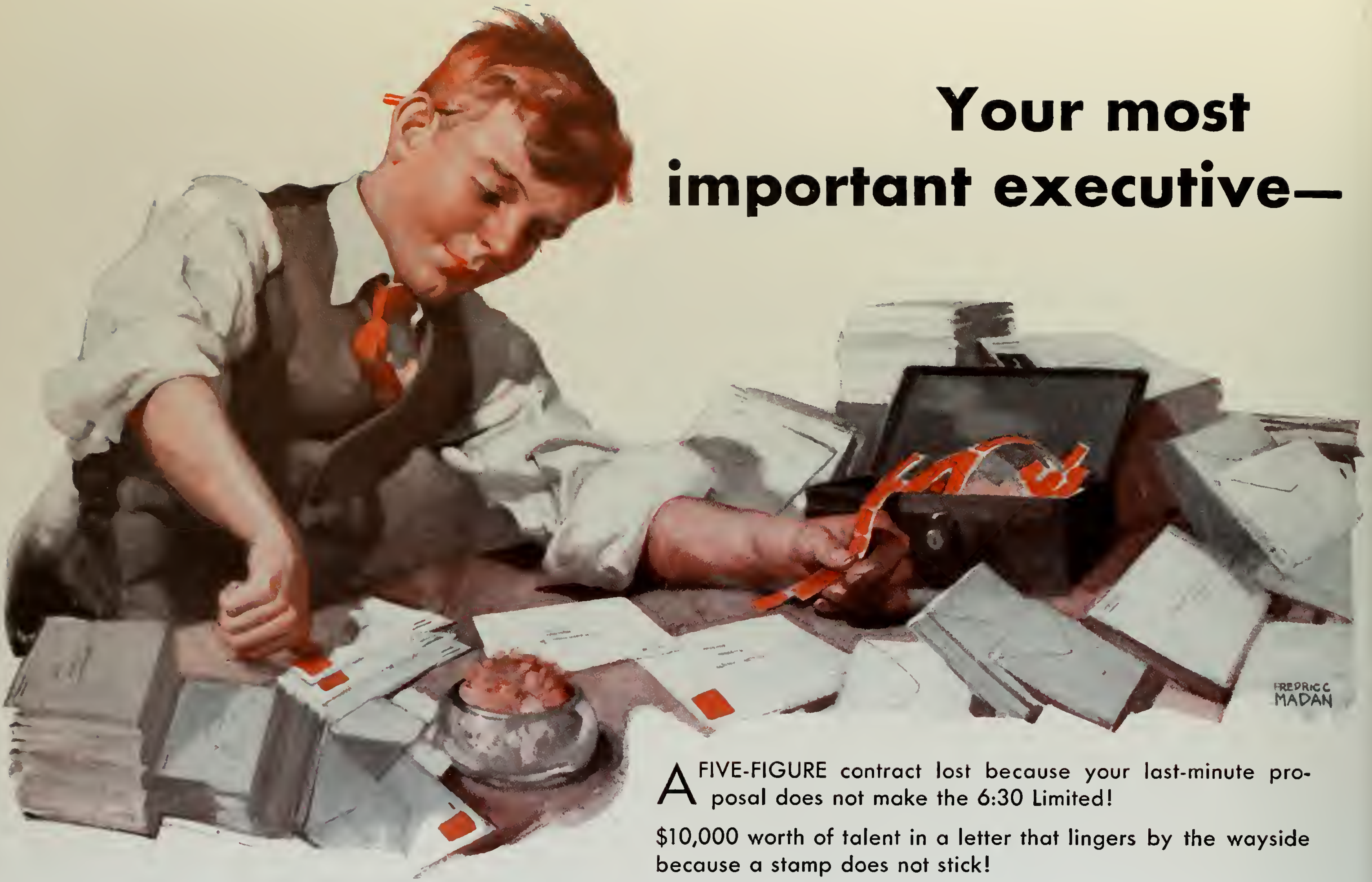

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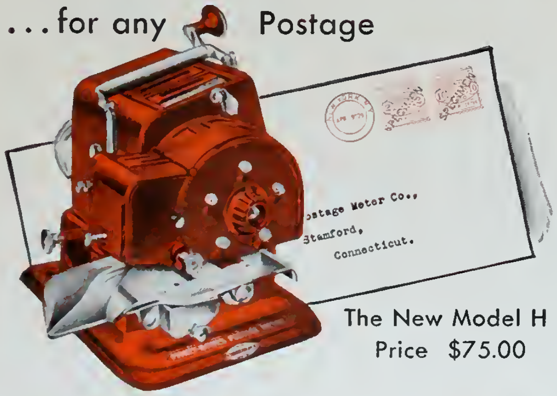

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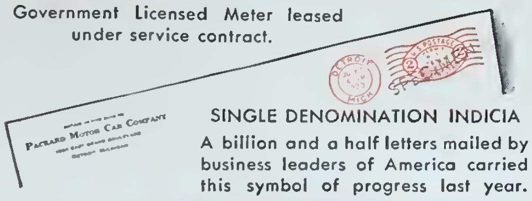

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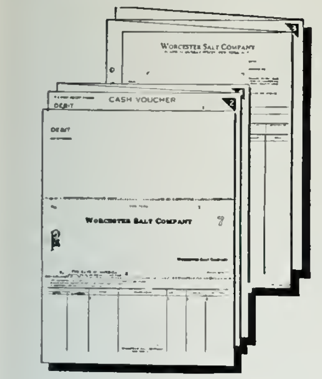

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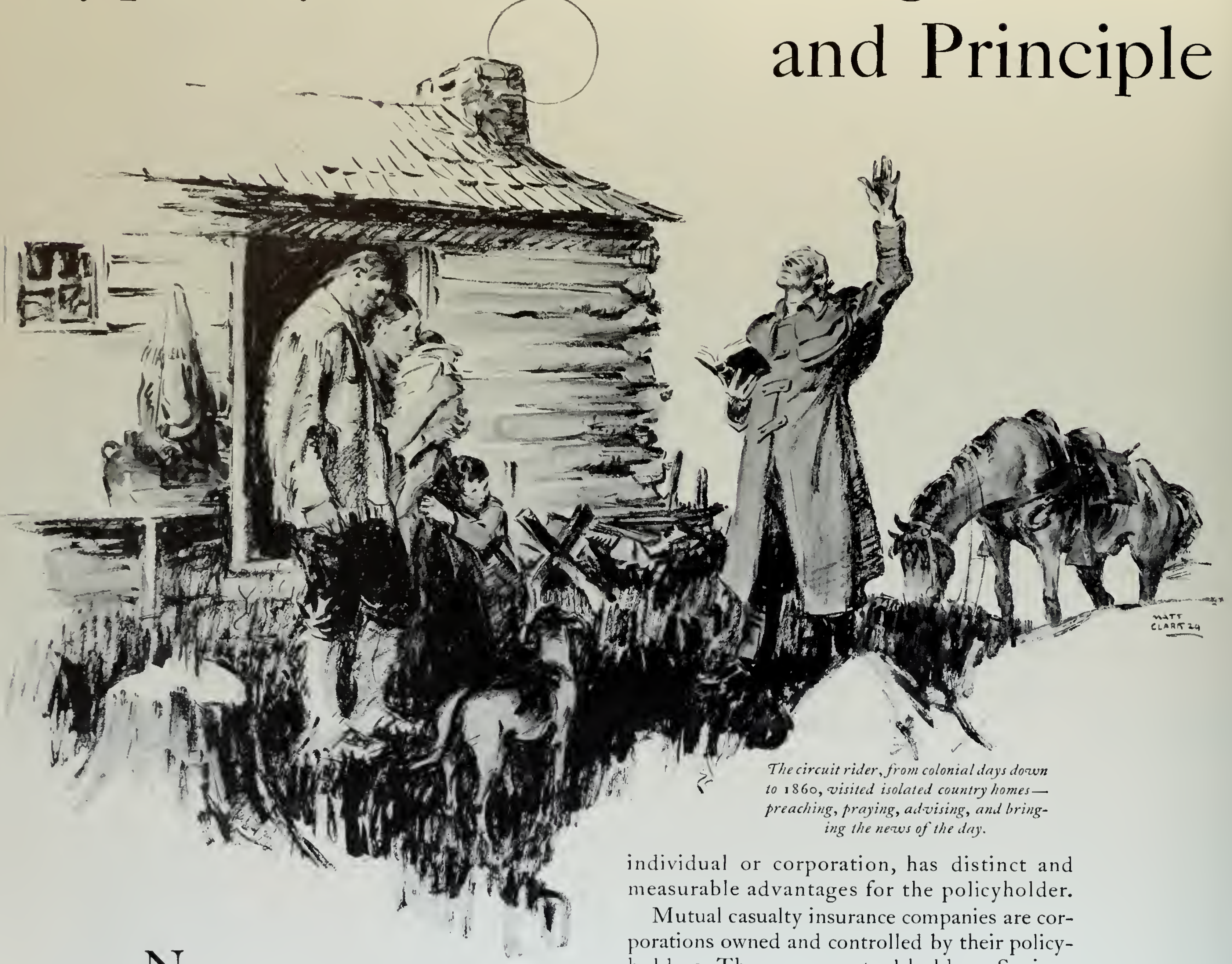

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one which we will examine in the following separate section, which will also serve as our conclusion.

The Conclusion

American civilization, these last busy years, might be expressed in terms of barriers, their demolition. Not only space-barriers and time-barriers but price-barriers (a car for every price) and culture-barriers (in our colleges 920,000 students). If everybody is to have everything then everything must be much of a muchness—a corollary which sensitive people resent.

Hunger, cold, exile, blood,—such is the traditional price of revolution. Noting with profound satisfaction that we have made our revolution without any payment in such sacrificial coin, we inquire, somewhat nervously, what have we paid, and we say we have sacrificed the individual to the mass.

Actually we have scarcely felt the pinch. Actually I, John Individual, have expressed my ego, and possibly expanded it, to a degree my grandfather could not have believed possible. And this not *in spite of* but apparently *because of* the fact that, with a few relatively unimportant restrictions, we have let Industry & Commerce consolidate and expand as much as it pleases. Where could our objection lie? Will we indict Woolworth for opening in our town a store exactly like those which have so well pleased 1,248 other towns? Can we object to the *Saturday Evening Post* vending the same story to 3,000,000 people if 3,000,000 people desire it? If one company makes 40% of our steel what is our complaint, if we have not an idea how to produce steel cheaper or better?

In short, we present the curious spectacle of a nation rapidly changing which has never debated the change. (We did, of course, debate it under Theodore Roosevelt before we understood the question. And certain odd fellows have since done some debating before tiny audiences.) Now, nothing Alice saw in Wonderland could be stranger—is it the bankers who will cause us to debate, for the first time, the desirability of our civilization? Is branch banking destined to define the issue between Machine and Man? Will the Individualist rise upon stump or pulpit and proclaim that Consolidation may have our steel, our amusements, even our food but shall not desecrate the bank? And, having saved the bank for Individualism, will the tide turn until again everyman under his own vine shall churn his individual butter from his individual cow?

Whether a national debate on Individualism will be precipitated by the trend toward consolidation of banking resources, we cannot say. It is possible. But it would seem that it is too late appreciably to check the trend. Too much happened in 1929. The trend naturally slackened pace after October but all evidence points to more bank mergers, more formations of Groups, ultimate extension of branch banking even into nation-wide propositions. There is no widespread desire for this development. Neither was there agitation in favor of concentration in Industry. Concentration simply came in Industry; it comes in Banking. It comes for reasons so varied and complex that they cannot be categorized. A bank corporation may be started for reasons of private gain. Another may be started to compete with the first. One banker may sell his bank to a Group because he has no sons or a low opinion of his sons' ability. Two big banks may merge to avoid separate absorption into a Group and the merged bank may itself start a Group under the momentum. Personalities, competition, facts, fear, profit, fashion—the whys are obscure, the result is patent.

It seems clear, moreover, that the development is entirely consonant with the kind of civilization we are erecting. In saying this we need not descend to the childish mistake of arguing from analogy. We need not say that just as railroads, stores, churches, motors, amusements, lawyers have consolidated, so also must banks. But we must say that the consolidation in nearly everything else radically changes the kind of civilization which banking must serve. Thus: 1) the very fact of consolidation elsewhere creates a new banking question; 2) the factors causing consolidation elsewhere *may* apply with equal force to banking.

We are forced to the conclusion that the factors causing consolidation in all else *do* apply to banking with sufficient force to make further consolidation (and branching) not only inevitable, but, in the circumstances, wise. Nothing but an almost inconceivable law can break up the present Groups or prevent formation of more Groups. The Group idea serves as a worthy intermediate expedient. But it can scarcely be regarded as an ultimate pattern. If both the Northwest Bancorporation and the First Bank Stock Corporation were legally permitted to put all their several banks in one big bank, one or the other would do so in short order for

THE NEXT STEP IN PUBLIC UTILITY SERVICE

E. DAVENPORT

DURING the last few years, America has watched with amazement the gigantic development of public utilities. The generation and transmission of electricity has been multiplied to the great benefit of industry and with an ever-increasing contribution to the efficiency, comfort, convenience and happiness of modern life.

The centralization of electric generation, with its resulting economies and advantages to the public, is comparable to all utility services. We have seen central pumping stations and underground water mains supplant hundreds of thousands of individual pumps and wells; central electric stations have rendered obsolete the kerosene lamp and other individual systems for producing power and illumination; modern sewerage systems contribute to health and sanitation, and transportation utilities girdle the continent with speed and comfort.

In practically every city and town, smoking chimneys provide condemning evidence to the inefficiency of our common heating practices. Thousands of tons of soot are distributed over our communities, soiling our beautiful buildings, ruining our merchandise and seriously affecting our health. Monstrous coal and ash trucks add to our traffic congestion and thousands of individual fires set up a terrifying fire hazard. A great need exists for public heating.

In scores of American cities, the magic hand of Public Utility Service is demonstrating that these conditions can be vastly improved by District Heating. Generating steam in efficient central boiler Plants and distributing it through well insulated underground mains to all of the buildings within a given district is the solution public utilities are offering to the age-old heating problem. Public heating plants are growing rapidly in response to public demand for service.

Not only for heating purposes, but for process work in industrial plants, enormous quantities of steam are required. Public utility executives, constantly on the lookout for opportunities to render profitable public service, are realizing that District Heating for business, residential and industrial sections is a field of utility service where the surface has only been scratched. Here may be discovered manifold opportunities for economies, increased incomes and magnified public benefit.

With the widespread financial support the American public is giving to public utility enterprises, we may reasonably look for the same rapid expansion in public steam service as we have observed in other fields of service requirements.

For more than fifty years the activities of the American District Steam Company have been closely allied with the development of District Heating. The experience gained through this close association is available to utility executives and others interested.

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NORTH TONAWANDA, N.Y.

ADSCO

A
Personal Invitation
to
Hotel Hollenden

I TAKE pleasure in extending to the readers of "Fortune" a most cordial personal invitation to make The Hotel Hollenden their home when in Cleveland. Located in the heart of Cleveland's business and financial district, The Hollenden offers in grateful combination, homelike comfort, luxurious surroundings, an unexcelled cuisine and an atmosphere of smartness and reasonable and uniform rates. The Hollenden is one of the distinguished hotels of the country.

The famous Crystal Dining Room is a brilliant and delightful place to dine. In the "Show Boat" you will find "a supper restaurant that is totally different" and music by Emerson Gill and his "Show Boat" orchestra.

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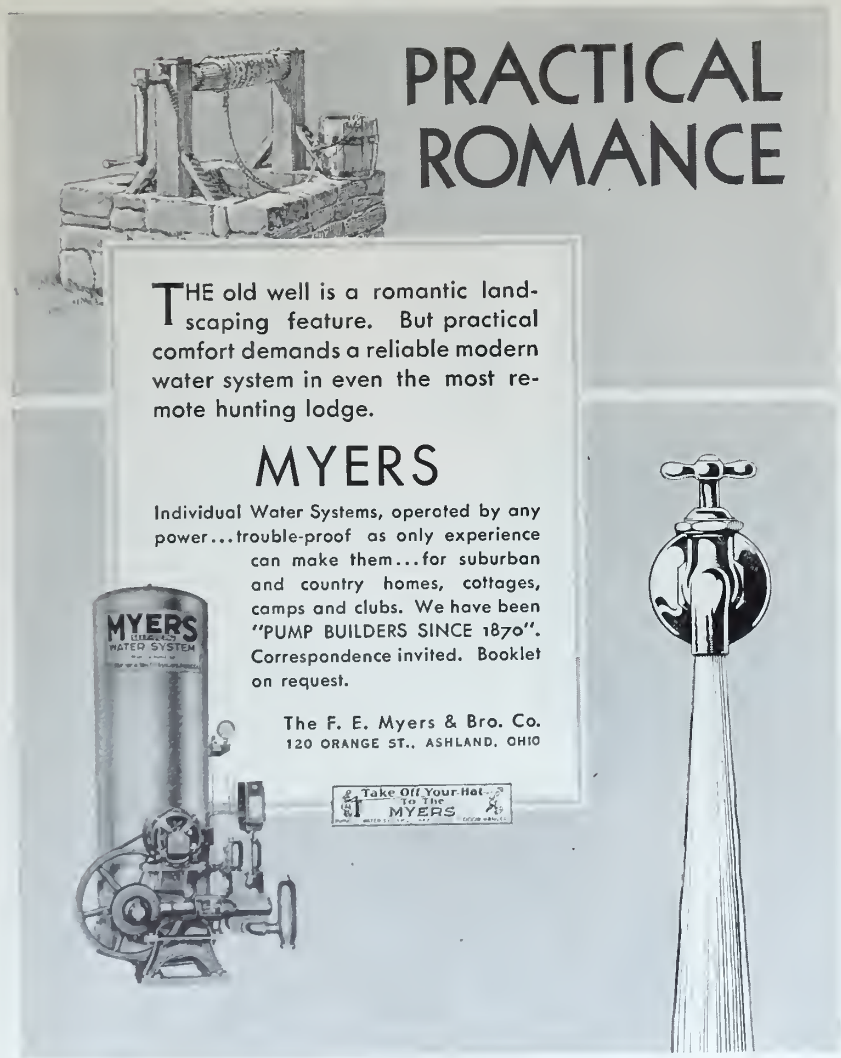
I want to take this opportunity to place the service and personnel of this great modern hotel at your command, and to assure you of my personal attention to your comfort while here.

Sincerely yours,

Theo DeWitt
Vice Pres. & Gen. Mgr.

In Cleveland-it's The
HOLLENDEN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obvious reasons of efficient administration. As soon as one did it, the other would have to follow.

Once a Group has transformed itself into a Big Bank with Branches, it becomes increasingly difficult to circumscribe by rule its proper area of activity. We may agree that, always, there should be something neighborly about a bank, but it will be almost impossible to define who is or ought to be a bank's proper neighbor. Neighborliness suggests a community of interest, and, with this idea the Comptroller of the Currency has worked out a most ingenious scheme of geographically defining the economic communities of the U.S. His regional plan is excellent as a starter. But clearly, neighborliness may exist to a smaller degree between two juxtaposed flat-dwellers than between a manufacturer in Missouri, a retailer in Maine and a banker in Chicago. Clearly, the old definitions fail us. For the moment paradoxes contain the greater truths. It is precisely a continental nation of 2,973,774 square miles that is becoming the most close-knit of neighborhoods. Look far enough ahead, and see the sharp, although not inevitable, alternative of either nation-wide Branch Banking or a turn in the tide of American civilization. More specifically, it is to be noted that the most compelling reason for regional branch banking (greater safety) applies even more strongly to inter-region or nation-wide branch banking. There is a great deal of diversification within the Ninth Reserve District—there is not only more, but fundamentally more important diversification in the whole body of the U. S.

The issue of Individualism arises more acutely in Banking than in Industry because of the semi-professional nature of the Banker which we have already emphasized. The Anti-branch-bankers assume that the independent local bank-owner will be a better man than the branch-manager. The assumption is too large to accept. In the first place, the man sent to manage a branch, after having been picked, trained and sharpened in a highly successful and competitive organization, may oftener than not be a better *Banker* than the lone stalwart who previously owned the local bank. In the second place, the comparison is inaccurate because it must go further, much, much further. We must compare the branch-manager backed by a tremendous organization guided by the highest-paid ability with the local stalwart backed by very little except himself—backed, in many cases, not even by a proper accountant. And the best test is the very fear of local bankers that Branch Bankers will put them out of business. Not by foul means. Simply by better service.

If this is not the case, if the branch bank cannot attract customers by better service, and if it cannot therefore better serve its locality, then the Anti-branch-banker can have little practical objection to laws permitting Branch Banking. As a matter of fact the Anti-branch-banker probably does assume with the rest of us that the big organization *will* give better service.

At any rate, all the analogies from contemporary civilization support the view. The Machine has despatched us, with our almost unanimous consent, upon an adventure in consolidation and organization. The hypochondriac among us may have unusually good reason to count the pulse and take the temperature of his Individualism. The rest of us are not easily, perhaps not easily enough, alarmed. On the whole, we like extraordinarily well the huge neighborhood into which our lives are cast. Most of us do business with, or are even employed by "neighbors" we never see through agencies we cannot comprehend. In this new geography our enterprise does not seem to grow less, while its scope most certainly increases. It seems reasonable, therefore, for us to say: Let banking by all means continue to be restricted by geography—but let the Atlas be a 1930 edition.

Appendix

Note on FORTUNE

The design of FORTUNE is based upon its function of presenting a clear and readable text profusely illustrated with pictures, mostly photographic, in a form ample and agreeable to the eye. It is planned upon an economic scale which permits it to go toward that end beyond the technical limitations of most periodicals.

Type appears thin and weak on the coated papers ordinarily required for "half-tone" reproduction of photos, and the reflections from their polished surface are confusing and trying to the eyes. Photographs may be reproduced by the "Intaglio" process—the re-

ALL

THAT IS BEAUTIFUL

SHALL ABIDE FOREVER

Detail of Amphitheatre, Arlington Memorial, Arlington National Cemetary

For information on memorials and mausoleums, write for booklet entitled, *All That Is Beautiful Shall Abide Forever.* It simplifies the problem of selecting designs, illustrates the 12 basic types of modern cemetery memorials, explains our nation-wide service through local Master Craftsmen in Marble.

THE great Arlington Memorial Amphitheatre symbolizes the whole nation's measureless desire to express and perpetuate its gratitude to its defenders in all wars. ℭ For this supreme purpose, only the best was sought after—not the most costly, but the finest, the most inspiring and beautiful. They who planned strove to create a memorial of matchless splendor and significance so that it should endure and be cherished through unnumbered centuries. They built it *entirely of Vermont Marble.* ℭ Older than the nation is the tradition of Vermont Marble's excellence. In simple tablets and sculptured mausoleums, in noble buildings, in homes where beauty also abides, and in all forms of garden furniture, Vermont Marble represents established culture, serene permanence and sound economy of investment. It is strong, enduring and beautiful. *Specify Vermont Marble.* There are varied types from many famous quarries for every architectural, decorative and memorial purpose . . . always available in every American community. Write for detailed information.

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Arundel is the greatest news story of the American Revolution . . . how Benedict Arnold's half-starved army blundered through swamps and rapids to the frozen plains of Quebec. This romantic novel is the first complete and accurate description ever written of this dramatic campaign. Compared by Booth Tarkington with *The Cloister and The Hearth* and *The Three Musketeers.* $2.50

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To Jevons, the young London doctor, a patient was often more interesting than a case. His sympathy, as sensitive as his stethoscope, at last swept both himself and his sister through an experience that was as beautiful as it was tragic. *The Hidden City* is a powerful novel of the post-war London of misfits and disillusion, with youth rebuilding adventure out of ashes. $2.50

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verse of ordinary half-tone printing—with greater depth and richness, and on papers which are natural and agreeable to look at and to handle, without disturbing gloss. But this process does not produce the best result in the printing of text.

The illustrations in Fortune have been printed by the "Intaglio" process to avoid coated paper and give better reproduction. The text is printed typographically to give it greater impression, sharpness and clarity.

The size and proportions of the magazine are designed to give scope to its illustrations and text without crowding and margins to its pages which shall be in accord with the best principles of fine bookmaking.

The type selected is a reproduction by the English Monotype Company of the letter designed by Baskerville in the XVIIIth century. It was Baskerville's aim to modernize and clarify the then existing types and this letter which is free from archaisms and familiar to modern eyes has yet none of the condensation and "meanness" of later faces.

The covers are to be a special feature and in place of the "process" reproductions in half-tone generally employed on periodicals, a design by a distinguished artist will appear each month, which will be made especially for printing in flat colors and which will have the character of an original print.

Mr. T. M. Cleland is responsible for Fortune's design; he remains as Fortune's art editor and he has contributed Fortune's first cover.

Note on Color.

[1] Prof. Hardy describes his color analyser thus: "A specimen and a surface of magnesium carbonate are illuminated from opposite sides of a ribbon filament tungsten lamp. Beams of light from the specimen and from the magnesium carbonate standard are alternately admitted to the slit of a dispersing system. A narrow band of each of the spectra thus formed falls successively on a photoelectric cell and causes a pulsating current in the cell circuit when the two beams are of unequal intensity. This current is amplified by pliotrons and the alternating component is applied to the field coils of a small motor, the armature being supplied from an independent source of the same frequency. With this arrangement, the armature rotates in one direction when the beam from the specimen is more intense and in the opposite direction when the beam from the standard is more intense. When the intensities are equal, the field current ceases and the motor stops. By causing the motor to control a diaphragm which varies the illumination on the magnesium carbonate, the intensities of the two beams are automatically balanced. A pen operating on a rotating drum records the position of this diaphragm while the rotation of the drum changes the wave length of the spectral band admitted to the photoelectric cell. In this way, a complete spectrophotoelectric curve for the entire visible spectrum is traced in approximately 30 seconds. The precision has been found more than adequate for all colorimetric purposes."

General Electric Company will sell the commercial model for $5,000 net f.o.b.

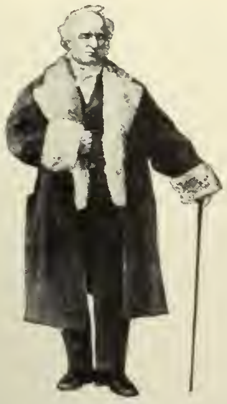
Notes on Swift.

[1] Pork products make up the greatest part of the Packer's total. Each day the U. S. eats about 30,000,000 lbs. of pork products, 19,000,000 lbs. of dressed beef, 5,500,000 lbs. of chicken, ducks, etc., only 1,750,000 lbs. of lamb and mutton.

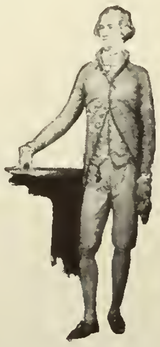
[2] It should be noted here that among the adjustments made by the hog is not the adjustment from kindness to cruelty. Evidences of cruelty in the yards are difficult if not impossible to find. The S.P.C.A. maintains an office at the gate of the yards; it has full access to the Swift plant. Among Swift's visitors has been the Duchess of Hamilton and Brandon, President of the Animal Defence and Anti-Vivisection Society of London. With her she brought a pistol to demonstrate model British killing methods. Her Swift host looked with some alarm at the pistol, satisfied her by explaining that Swift is experimenting with electrical stunning devices.

[3] L. F. Swift ascribes the birth of the adage to a remark of Founder Father Swift: "Now we use all of the hog except his grunt." Latest Swift wisecrack: "Once we used all of the hog except his squeal. Now we've gone on the air and we use the squeal for static." As a matter of fact, the adage is not quite true. Swift makes no use at present of the paunch manure found in slaughtered animals. Although it is possible to extract useful gases from such manure, Swift has found it cheaper to have it carted away and destroyed.

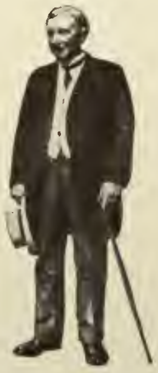
[4] Three ways are known of destroying the trichina germ—heat, cold and drying. Domestic sausages (Frankfurts, Bolognas, etc.) are cooked before being cased, hence do not need the drying processes of dry "summer" sausages (salami, peperoni). For a time the government prohibited the manufacture of dry sausage; Swift helped in experiments which saved the industry.



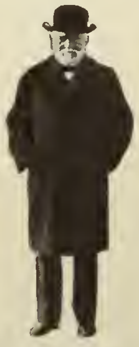
"Gentlemen," he wrote, "you have cheated me. I will not sue you. The law takes too long. I will ruin you." And he did! (*Page 89*)



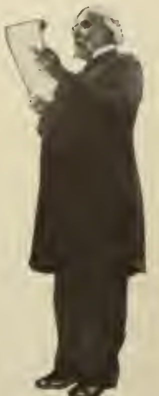
A poor immigrant, an illegitimate child, he forced his way to the forefront of American history and laid the foundation for our whole national financial structure. (*Page 49*)



At 20 a bookkeeper making $12 a month but with the firm conviction that he must get rich. Oil made him the world's first billionaire. (*Page 227*)

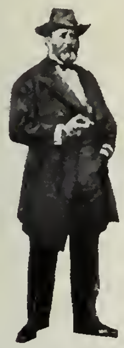


The greatest salesman of all time. He bluffed Morgan into buying his business for $200,000,000 more than it was worth. Then he gave his millions away. (*Page 268*)



He bought a railroad without a nickel and grew rich. Then Harriman came along and made him fight the most bitterly contested battle in Wall Street history. (*Page 242*)

These giants march through its pages . . .



Appomattox was his glory, Wall Street his Waterloo. He wanted wealth. Wall Street made him penniless, shattered his reputation, left him to die a broken man. (*Page 212*)

Here is the story of those men who have been foremost in the development of Wall Street, and the colorful chronicle of the events around which their activities centered. It is the story of the leaders of the millions who follow the quotations—the men who make the quotations. It is the tale of the steady contest which accompanied the growth of America.

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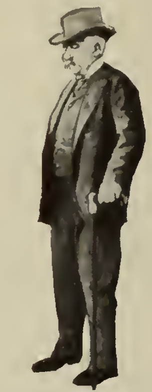

His power came to be greater than kings or presidents. And the house he founded virtually rules the financial world today. (*Page 286*)

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42 Illustrations

New York Times

. . . the workings of the mightiest interlocking financial and industrial machinery the world has ever known. It is the story of the birth and development of that power that Mr. Warshow tells, very capably and interestingly, in this book . . . His treatment of his theme is a happy combination of its personal and its general features, and in his estimates of characters and of industrial and commercial forces he shows an admirably judicial and clear-sighted temper.

The American Banker

A most fascinating chronicle . . . a vivid word picture.

The Boston Globe

The author writes with a vigorous stroke and spares no one—success or failure. The book is not only worth reading, it is important that everyone interested in financial affairs should read it, for it is the latest and best account of a remarkable period in American financial history . . . It is a strong and romantic story.

Philadelphia Public Ledger

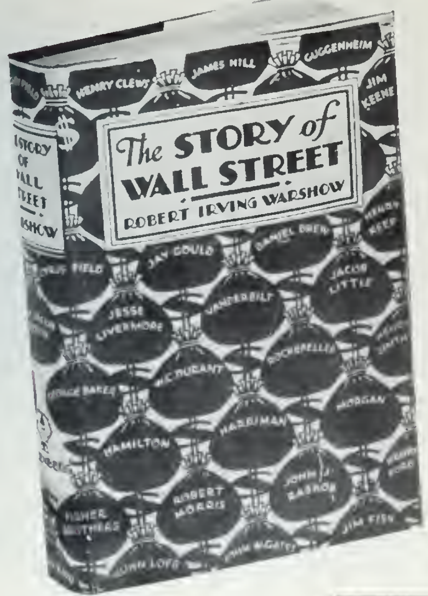
Altogether, the book drips money and struggle. I know of none on contemporary manifestations, at this moment, more absorbing, instructive and timely.

Philadelphia Inquirer

Amidst repercussions of the greatest cataclysm in American financial history "The Story of Wall Street" comes with indisputable timeliness. Mr. Warshow is little concerned with philosophy, with politics, or the economic aspects of Wall Street operations. His book is a stirring story of men and events, the speculator and the trader, leaders of millions who follow the quotations.

New York Telegram

With commendable brevity, an easy style, and an excellent selection of individuals and transactions, Warshow introduces the laymen to the intricacies of the stock market with such gentle skill that one does not realize the splendid thoroughness of the book until he has inadvertently found himself anticipating the author.



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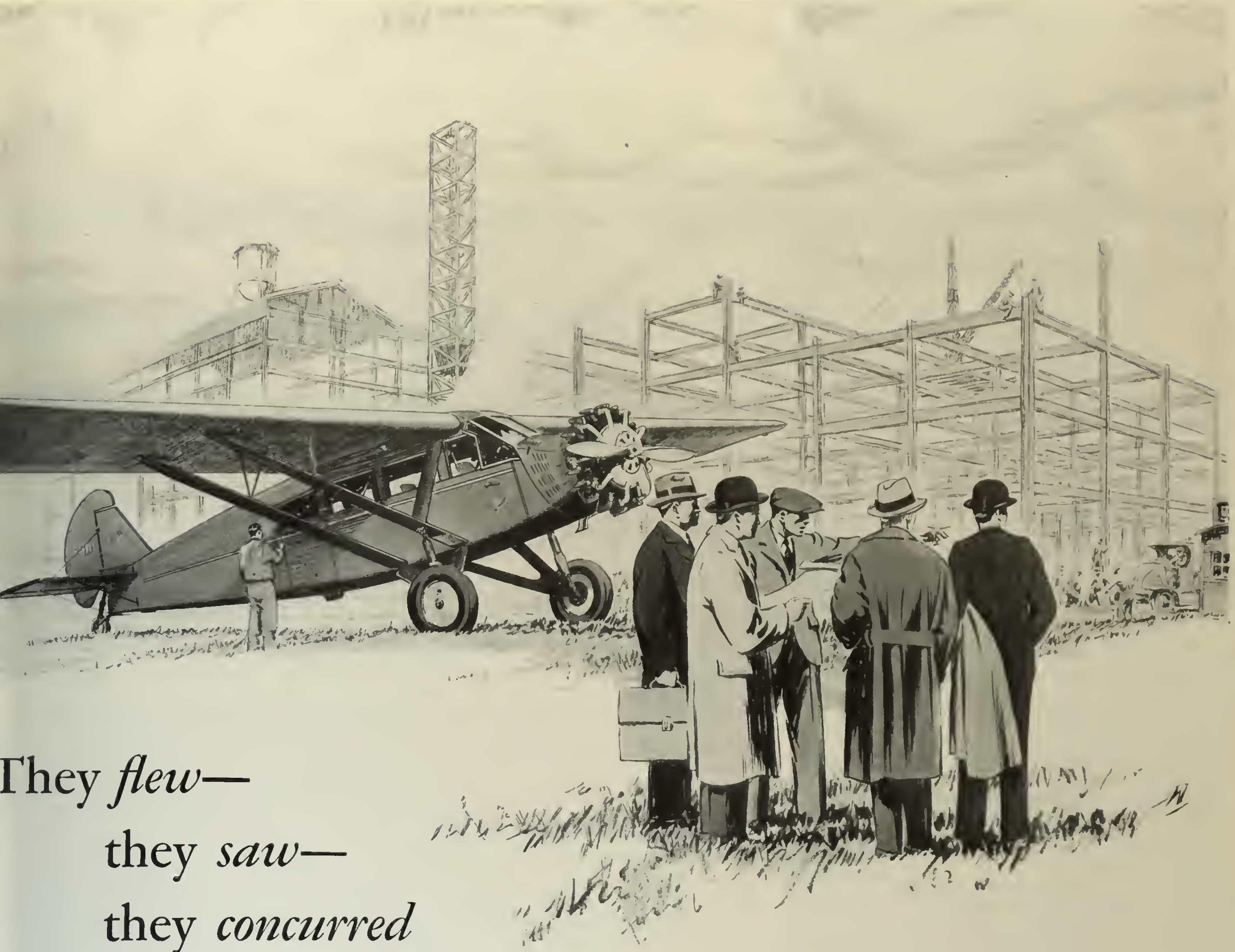

They *flew*—
they *saw*—
they *concurred*

A decision was needed—urgently. The successful completion of a uge project was at stake. The direcors, hurriedly summoned, decided to ee conditions for themselves. Boarding heir private Travel Air they flew—hey saw, they concurred.

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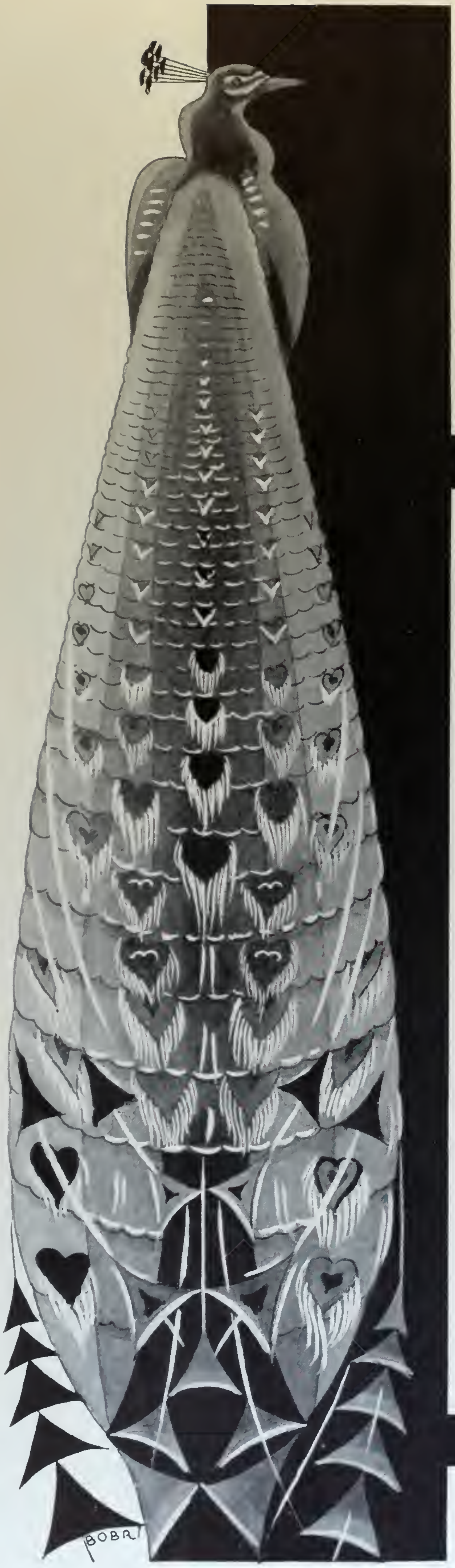
A PLANE FOR EVERY PURPOSE TRAVEL AIR



DOES YOUR PRODUCT LOOK ITS BEST?

IT is no longer enough to produce merchandise that is well made, wears well, is useful. Purchasers are considering the looks of every article submitted to their choice.

Color adds to the attractiveness of most goods displayed in stores and show rooms. Even typewriters and telephone instruments are putting aside the conventional black for brighter, gayer hues.

Nitrocellulose lacquers have opened new possibilities for applying color to wood, metal, fabrics, and other materials. They offer more advantages than the obvious ones of beauty, quick drying, and ease of application. They form a tough, durable, protective film that is waterproof and is easy to clean with soap and water. They may be transparent and invisible, or, when pigments are added, completely opaque.

The nitrocellulose film is adhesive as well as protective. Solutions of nitrocellulose form light adhesives between articles that must be easily detachable, or a cement as strong as the materials it binds. Solutions of this versatile product are used both as a stiffener for fabrics, and as a waterproofing that leaves the fabric soft and pliable.

New uses for nitrocellulose lacquers and special solutions are discovered almost every day. There are few industries in which they cannot be profitably employed. Perhaps this suggests a new use to you. Lacquers are sold by the paint, varnish, and lacquer trades.

We have prepared a booklet called, "The Story of Modern Lacquers," which will tell you many interesting things about lacquers that it may be profitable for you to know. A request for the booklet on your business stationery will bring it to you promptly.

HERCULES POWDER COMPANY
(INCORPORATED)
Room 19 Cellulose Products Department
WILMINGTON, DELAWARE

Fortune,
March, 1930

FORTUNE is published monthly by TIME, INC., at 205 E. 42nd St., New York, N. Y. Application for entry as second-class matter is pending. Subscription rates: One year in the U. S. and possessions, $10; Canada, $10.50; elsewhere, $11.

Vol
N

FACING THE WINDS
FROM A MIGHTY SEA

SAN FRANCISCO LOOKS WEST . . . NTO THE FUTURE

Out of the bay Portola found, cross the path of Drake's *Golden Hind* a giant commerce is plot-ing its way. On the farthest hores of the long Pacific tomorrow is beginning to dawn . . .

900,000,000 people in the ands that it borders are waking o wonder what's new in the world nd whence their share of the vorld's production.

Alert, modern-minded, San rancisco is preparing an answer.

San Francisco Bay is the atural gateway to these people n the lands bordering the Paci-ic; and the ground-work for this great Pacific commerce is already aid. Here the rails of three great ranscontinental roads meet water t the edge of a bay where every hip in the world could find shel-er at one time, and the value of vhose water-borne tonnage is even ow second in the United States. lere is the headquarters city for he leading financial, manufactur-ng, railroad, shipping and distri-uting interests of the West. San rancisco is center of a region enormously rich in natural resources (*economical natural gas is one*). A mild, sunny climate the year 'round and ideal living conditions raise labor to its highest productivity.

Philip Little

Today San Francisco serves the most concentrated population in the West. Within a radius of one hundred and fifty miles live half the people of California, while 1,600,000 people of more than average per capita wealth live within a radius of an hour's ride.

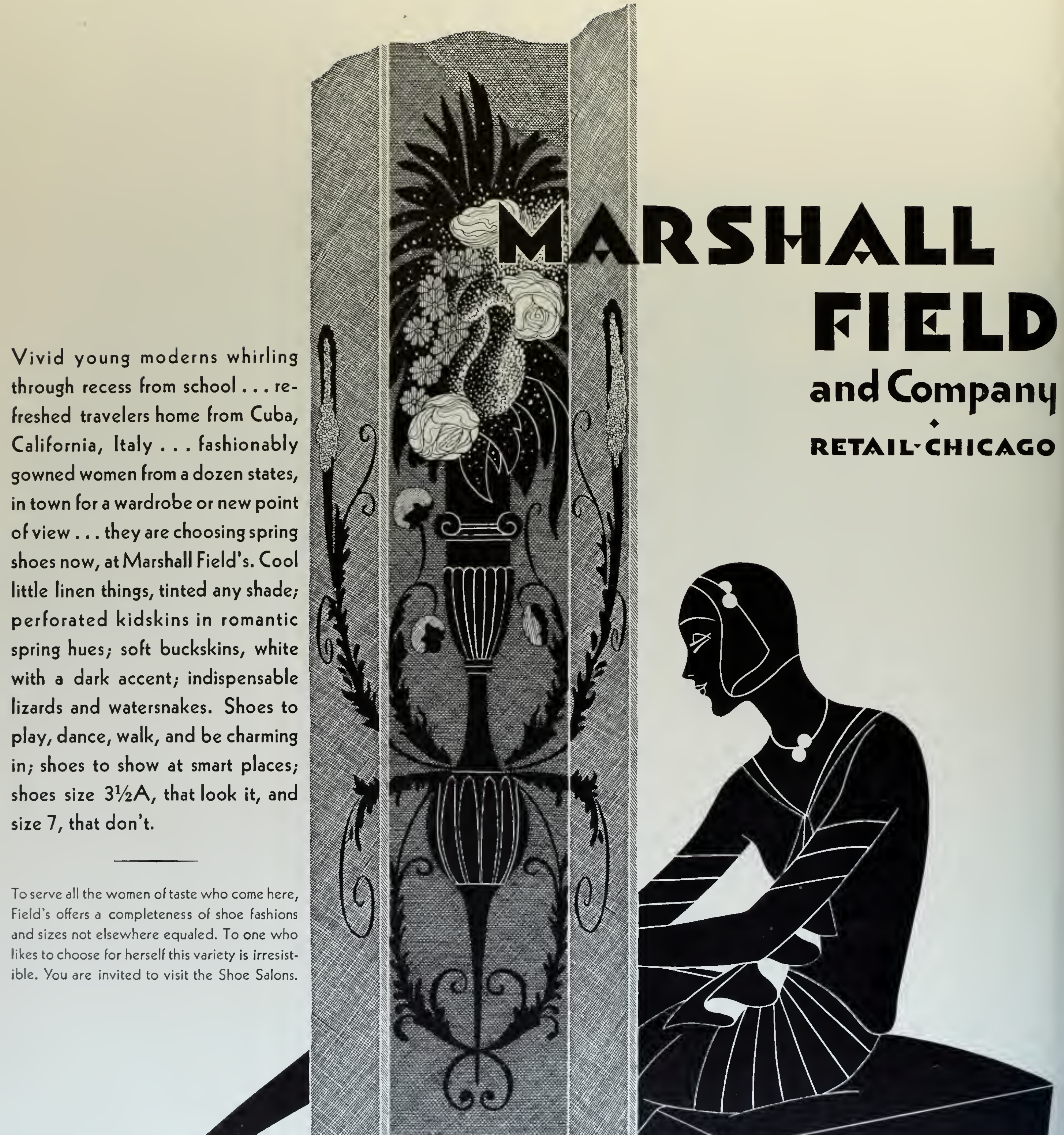
11,000,000 people who live west of the Rocky Mountains are served more quickly and cheaply from San Francisco than from any other city, and the advantages that make this so have a direct bearing on the problem of serving the near-billion along the Pacific.

The known tremendous advantage this city owns—and a pioneer sense that was born when the West was young—promise a future that none can deny.

Write Californians Inc., Dept. 2203, 703 Market St., San Francisco, whether or not you've a visit planned for this year. They are anxious to tell you more about San Francisco—to send you facts and photographs.

SAN FRANCISCO

IN CALIFORNIA—"WHERE LIFE IS BETTER"



MARSHALL FIELD

and Company

◆

RETAIL-CHICAGO

Vivid young moderns whirling through recess from school . . . refreshed travelers home from Cuba, California, Italy . . . fashionably gowned women from a dozen states, in town for a wardrobe or new point of view . . . they are choosing spring shoes now, at Marshall Field's. Cool little linen things, tinted any shade; perforated kidskins in romantic spring hues; soft buckskins, white with a dark accent; indispensable lizards and watersnakes. Shoes to play, dance, walk, and be charming in; shoes to show at smart places; shoes size 3½A, that look it, and size 7, that don't.

To serve all the women of taste who come here, Field's offers a completeness of shoe fashions and sizes not elsewhere equaled. To one who likes to choose for herself this variety is irresistible. You are invited to visit the Shoe Salons.

Some other notable users of Carrier Systems

Whitman's Chocolates
Gillette Razor
Roxy Theatre, N. Y.
Wrigley's Gum
Postum Cereals
Cheney Silks
Crown Rayon
Chicago Title & Trust Co.
New York Trust Company

Stanley
PERSIAN GARDEN
ROXY

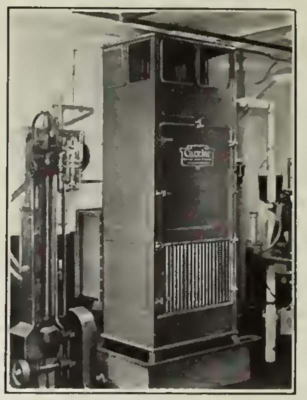
MANUFACTURED WEATHER

always pays its way

AN ARCHITECT designs an office building or a hotel which will be conspicuously modern—ven to the kind of air to be breathed by stenogpher or guest. His plans call for manufactured eather.

A department store, like Macy's or Hudson's, stalls a million-dollar plant for making weather . and the casual buyer of a paper of pins shops with eater comfort than ever before. A manager of a 00,000,000 enterprise, like the Postum Company, curately controls temperature and humidity in his ge plants with a weathermaking system as successlly as some one else does in a little workshop or boratory.

For twenty-five years Manufactured Weather has en winning its way all over the world under the idance of Willis H. Carrier. There is scarcely a rson anywhere who in recent years has not come contact with it. In a hundred famous theatres; in dozen great department stores; in hundreds of factories; and in a few of the most modern offices, banks, and hotels, Manufactured Weather pays its way.



Carrier Unit Air Conditioners such as this one in a laboratory of the Fisk Rubber Co. cost only a few hundred dollars, and in small rooms or factories provide the same automatically controlled Manufactured Weather that in larger places is provided by the Carrier Central System of Air Conditioning.

* * *

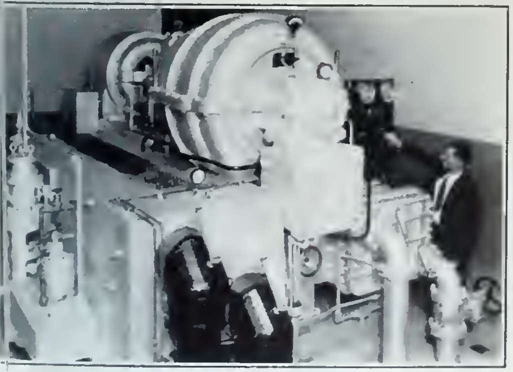
So rapidly has the industry grown that responsible people are now convinced that the general use of Manufactured Weather in office buildings, hotels, apartments, homes, is as inevitable as the use of elevators, automobiles and electric lights.

With Manufactured Weather indoors, you always breathe *cooled, cleaned* air, free of excess humidity in summer, while in winter you enjoy *cleaned, warmed* air at the proper humidity. The system is automatic. Once it is installed, you may depend upon ideal indoor weather the year round.

More and more it is being recognized that buildings with window-poles in corners, dust-cloths in desk drawers, nerve-racking noises in the ears of workers, drafty spots near windows for executives, and stuffy inner spaces for clerks are out of date. Those buildings which do not use Manufactured Weather—which are not cooled in summer and heated in winter with properly conditioned air—are rapidly becoming obsolete.

Carrier Engineers are at your service whether you are interested in conditioning a small room or need a plant for a 90-story building.

But whether your investment is one thousand dollars or one million dollars, you can depend upon Manufactured Weather paying you constant and generous dividends. It is not unusual for the entire cost of a factory installation to be saved in one year. In office buildings, hotels, and stores it is a highly profitable investment. Ask us to prove it.



s compact Carrier Centrifugal Refrigeration plant is part of the m which supplies Manufactured Weather to the Halls of Cons in the Capitol at Washington. During one hot, humid day this m often extracts 4000 gallons of water from the air. On the est day these rooms are as comfortable as the most delightful ntain resort.

Carrier Engineering Corporation

NEWARK, NEW JERSEY

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WASHINGTON · DETROIT · KANSAS CITY · DALLAS · LOS ANGELES

CARRIER ENGINEERING COMPANY, LTD.
LONDON, PARIS, BOMBAY, CALCUTTA
JOHANNESBURG

CARRIER LUFTTECHNISCHE GESELLSCHAFT
STUTTGART, BERLIN

Manufactured Weather *makes* "Every day a *good* day"

Our Congratulations
to
Fortune

And, in connection with your epochal first issue, our thanks for the privilege of presenting our message, in such distinguished company, to the largest possible assemblage of the most responsible class of readers in America—a class which naturally would be attracted likewise to

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THESE world-famous hotels have been individualized by impressive ideals of service, quiet dignity and a lasting congenial atmosphere.

Residential suites for long term leases available at special discounts.

Particular attention given to Banquets, Balls, and other Social Functions. Unusual facilities for Conventions at The Drake.

Write or consult C. C. Drake Company for steamship tickets, tours. Every facility for travelers. Offices in above hotels, and in The Roosevelt, New York, The Benjamin Franklin, Philadelphia, The Willard, Washington, The St. Francis, San Francisco.

The
BLACKSTONE
SOUTH MICHIGAN AVENUE
AND THE LAKE FRONT
CHICAGO

The DRAKE
HOTEL *Chicago*
LAKE SHORE DRIVE AT MICHIGAN AVENUE

Photo by Amemyo

THE
SAVOY-PLAZA

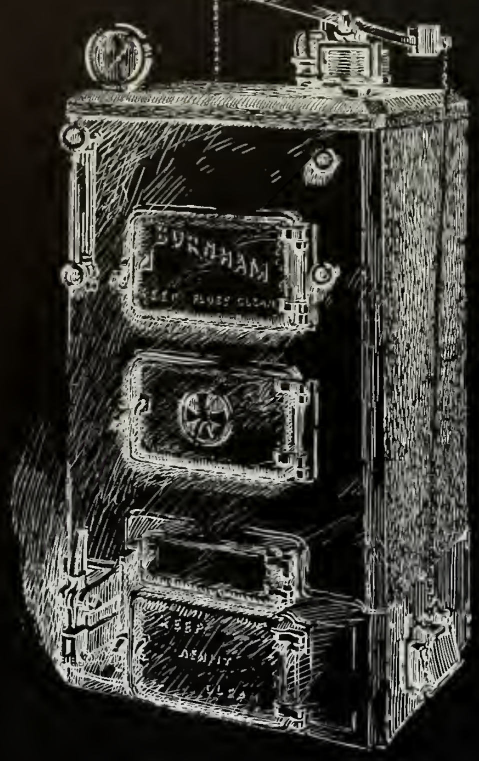
Majestic and Impressive with the 840 acres of Central Park at its doors . . . One of the world's distinguished Hotels with the Most Beautiful Outlook in New York.

Illustrated Brochure on Request

Fifth Avenue, New York, 58th to 59th Sts.

Henry A. Rost, *President*

Same Management as The Plaza



Now That Economy Counts For So Much

Burnham Boiler's long fire travel counts more than ever. Its long fire travel makes its short coal bill.

P.S.—

This same long fire travel is an additional insurance of economy, when oil is the fuel. It also has a way of muffling down combustion noises.

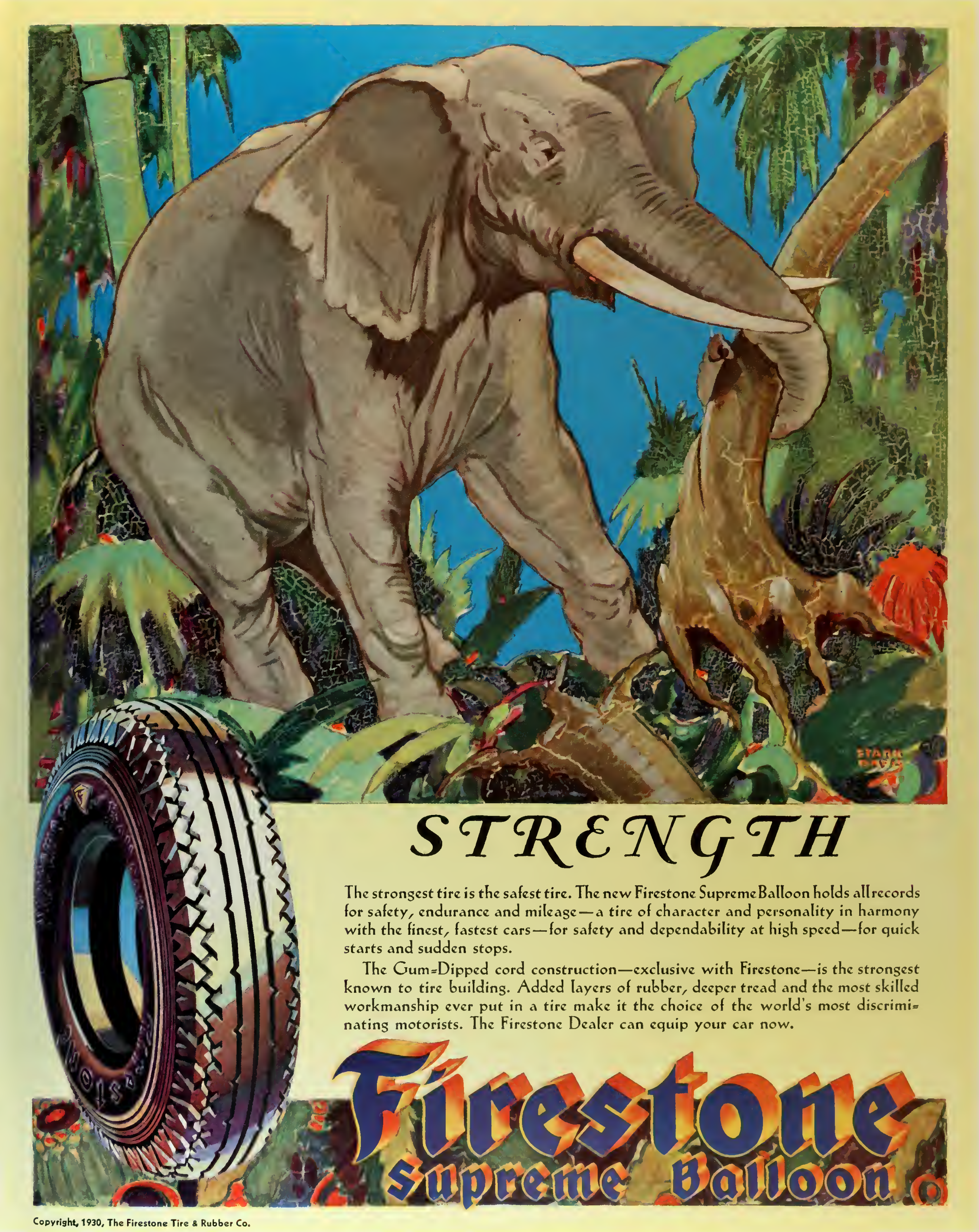
P.S.—P.S.—

There's a booklet called Letters To and Fro that tells of eight people's successful solution of eight separate home heating problems. Send for it.

Burnham Boiler Corporation

IRVINGTON, NEW YORK

Representatives in all principal cities of the United States and Canada



STRENGTH

The strongest tire is the safest tire. The new Firestone Supreme Balloon holds all records for safety, endurance and mileage—a tire of character and personality in harmony with the finest, fastest cars—for safety and dependability at high speed—for quick starts and sudden stops.

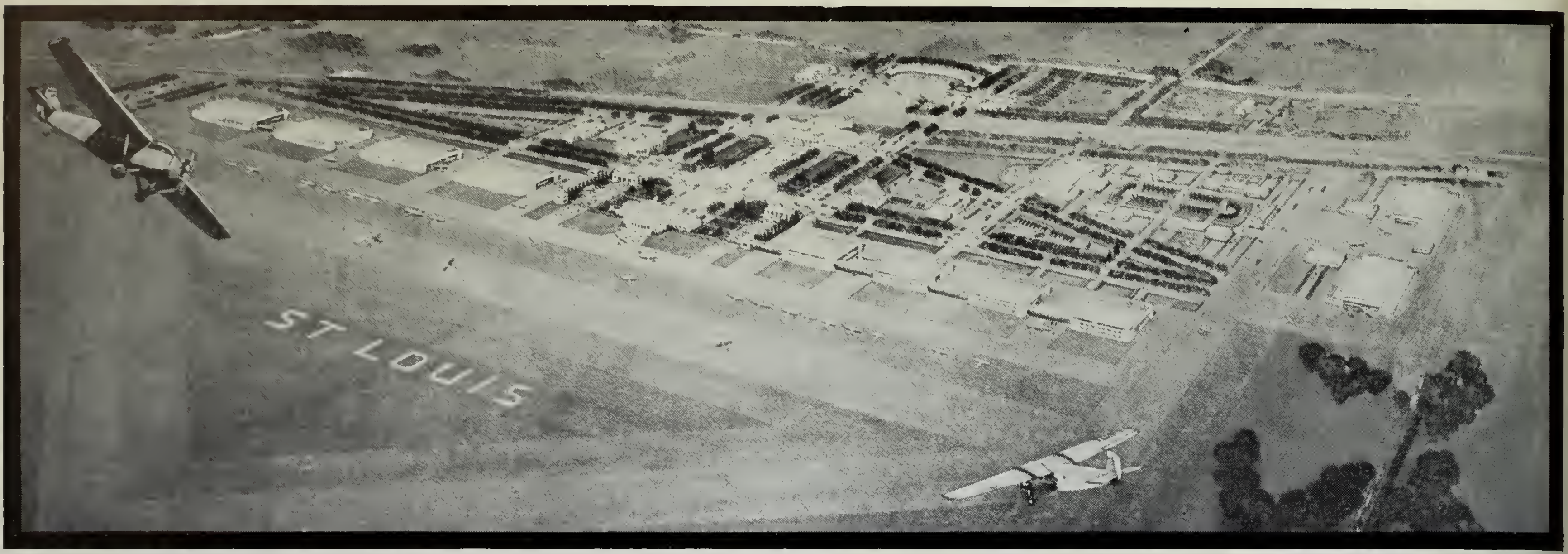
The Gum-Dipped cord construction—exclusive with Firestone—is the strongest known to tire building. Added layers of rubber, deeper tread and the most skilled workmanship ever put in a tire make it the choice of the world's most discriminating motorists. The Firestone Dealer can equip your car now.

Firestone
Supreme Balloon

Copyright, 1930, The Firestone Tire & Rubber Co.

The Airport • •

Key that opens the sky lanes to Commerce



THE pioneering has been done. Oceans have been crossed . . . continents spanned. The air mail is an accepted fact . . . transcontinental air-rail lines run on regular schedule.

Air transportation has proved itself. All that remains is to amplify, to extend, to make readily available.

But the ship that takes the sky must always be able to come down . . . in safety. Aviation can grow no faster than the airports the country provides.

An air liner taking on passengers at a Curtiss-Wright port

It is the purpose of the Curtiss-Wright Airports Corporation to see that this country does not lack for opportunity to put the air to good use.

So there are in actual operation today 12 Curtiss-Wright ports that stand as patterns for the whole world. More are in prospect. Millions of dollars in capital have been pledged exclusively to the planning, development and management of these ports so that this country may have as fine a system of transportation by air as the whole world knows.

Each Curtiss-Wright port is located with an eye to the future as well as to the present. They are close to industrial and population centers . . . far closer than expanding city lines will make possible in another decade.

They are large enough to handle all the traffic that the air will bear for years to come. They are so planned that they readily may be expanded . . . and they are financed and directed by one central, unified management so that each may have the advantage of specialized skill and experience.

In all of them, the entire industry is welcome. Space is for lease to transport companies, aerial photographers, railroads who will engage in air transportation, manufacturers of planes, of engines, supplies, and accessories, and fuel—all commercial operators and private owners.

Student instruction and local passenger carrying, however, are reserved exclusively for Curtiss-Wright Flying Service.

• • •

Curtiss-Wright will be glad to send descriptive literature on any or all of its ports to any executive interested. A representative will be found at each port. You may call on him there . . . or write either to him or the central offices of the Curtiss-Wright Airports Corp., at 27 W. 57th St., New York City.

Every facility for handling spectators as well as passengers and planes is provided at the Curtiss-Wright ports

CURTISS-WRIGHT AIRPORTS

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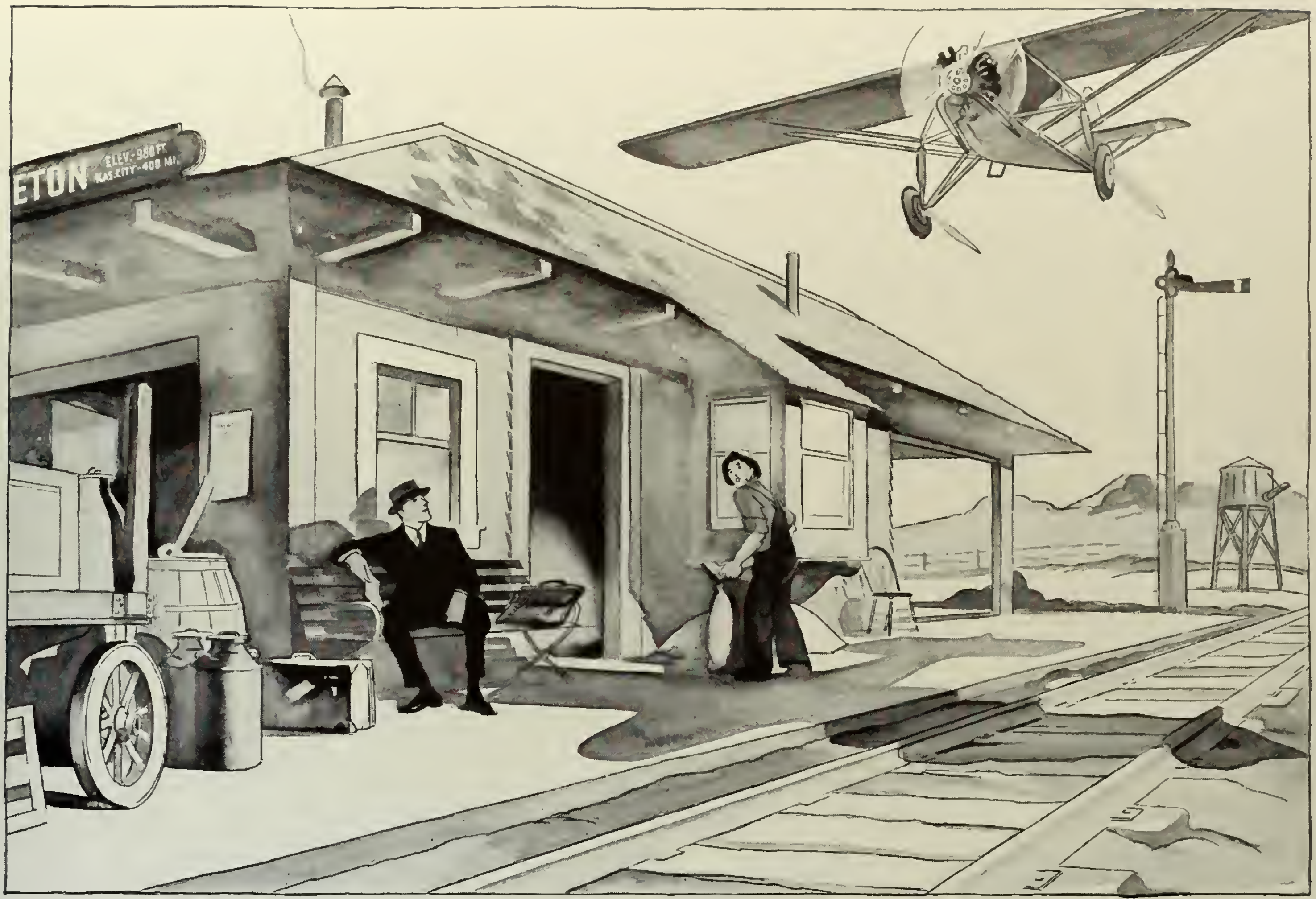
ETON
ELEV.-980 FT.
KAS.CITY-408 MI.

Your star salesman—
is he warming a seat on a railroad platform?

THE railroad junction may mean only a long, dreary wait to your star salesman—but it means a dollars and cents loss to your company. When he spends hours waiting for a train your firm loses not only his salaried time, but also the orders which he might have secured.

That fast air transportation minimizes such losses is one of the reasons why big business has enthusiastically turned to private planes.

The experience of one large Eastern manufacturing company is typical. An efficiency expert who was called in found that sales costs were too high. Investigation disclosed that two salesmen brought in 78 per cent of the total business each year. And it cost no more to travel each of these men than any of the other six members of the sales force.

To reduce sales costs the expert recommended that the star salesmen also take over some of the territories which were not yielding full sales quotas. To enable them to make the increased number of calls he advised the purchase of an airplane. His recommendation was adopted and, because a proved business plane was needed, a six-place Ryan was bought shortly afterward. Today, it has seen over 200 hours of service and has been a dividend-paying investment.

Executives who travel in Ryans are independent of railroad time-tables. With a speed of 150 miles per hour and a cruising range of 700 miles, Ryan planes make possible fast, conveniently arranged flying schedules. Let us tell you more about Ryan transportation. Write today for our illustrated catalog and complete information.

BUILDERS OF LINDBERGH'S RYAN "SPIRIT OF ST. LOUIS"

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The GENERAL
DUAL-BALLOON 8

–GOES A LONG WAY
TO MAKE FRIENDS

Why not enjoy the great difference

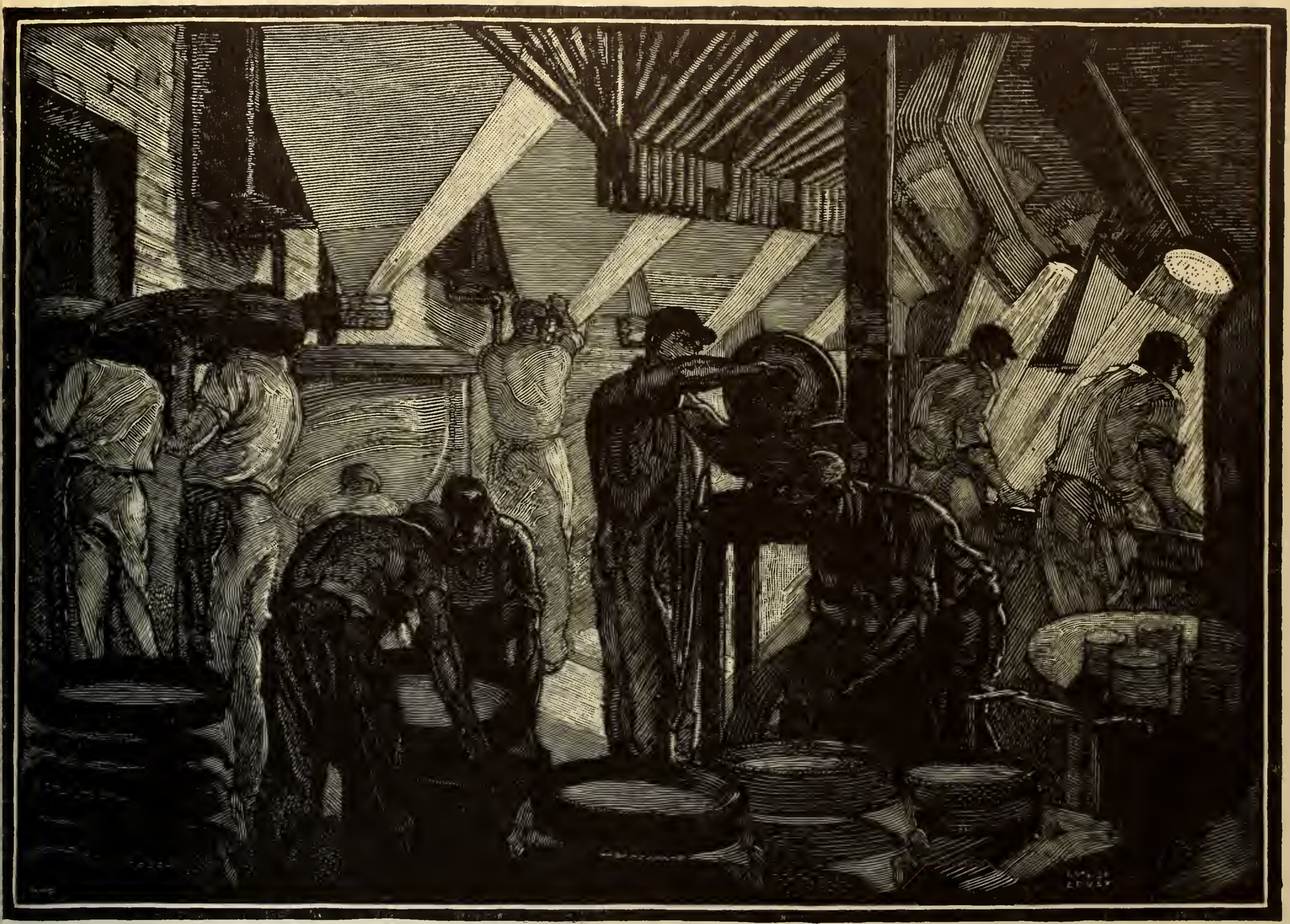
Cross-sections, diagrams and laboratory phraseology hold very little interest for most of us. But we are notably quick in attaching the proper significance to a good reputation . . . When people concede the superiority of a product they are willing to waive the reasons and accept the results. Personal experience is the surest means of bringing out the tangible results of extra value.

The *Dual*-Balloon has literally blazed a new trail for General's long-held leadership. It is extravagantly generous in the qualities that make up complete satisfaction.

Structurally, the *Dual*-Balloon is designed to double the advantages of single balloons. It exceeds every demand for luxurious comfort, controlled safety and big mileage. A set of *Dual*-Balloons on your car will prove the great difference you hear so much about.

The General Tire and Rubber Company, Akron, Ohio.

The GENERAL *Dual-Balloon 8*



Mural by Arthur Covey. Wood block engraving by Howard McCormack.

Producers of grinding wheels are facing most exacting demands
—thousands of specifications in the interest of rapid production with precision.

A situation that calls for schooled men in laboratories
—engineers who investigate the work these grinding wheels are expected to do
—skill and exacting methods in the grinding wheel plant
—Norton Company, Worcester, Massachusetts.

NORTON

Grinding Wheels
Grinding and Lapping Machines
Refractories
Porous Plates
Floor and Stair Tile
Pulpstones

The New York Trust Company

Capital, Surplus and Undivided
Profits $45,000,000

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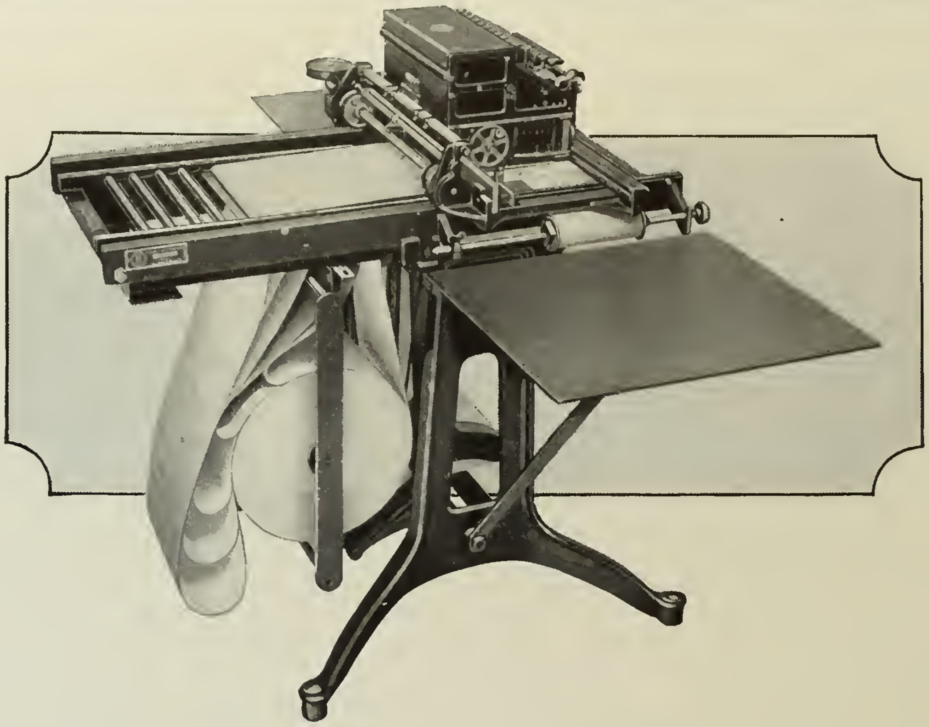
40TH STREET AND MADISON AVENUE
57TH STREET AND FIFTH AVENUE

GLOBE
Multi-PLY
FORMS

"non-stop" records



business, too, has its non-stop records

The wasteful *stops* in record-writing have been eliminated by Globe Multi-PLY forms. This "non-stop" method does away with the *getting ready* and *finishing up* operations which are always present when cut forms and carbons are used. No wasteful stops to stuff carbon paper, to jog sheets, align forms, insert in machine and remove carbon paper. With Multi-PLY these operations are done automatically and mechanically, saving 50% to 75% of the billing operator's time. 500 to 1000 sets of forms in one loading — truly a "non-stop" record.

save time and money

Time is further saved by combining forms. With Multi-PLY, invoices can be combined with order forms, department instructions, bills of lading and the like. Time spent in re-copying is saved — and since time is money — money is saved.

speed-up plant and office operations

Delays are costly. They not only waste time but they upset schedules and hamper production. Delays which occur when original data is passing from department to department for re-copying, are eliminated by combining forms and writing them the "non-stop" way — *in one operation — at one time — in one place.*

simplify record-writing

Simplify with Multi-PLY. Reduce red-tape — eliminate useless forms — cut down on clerical labor — speed up billing methods — make accounting easier. All these advantages come with the use of Multi-PLY Forms.

insure greater accuracy

Errors are costly — in time, temper and money. You run the risk of such errors every time records and forms are copied and re-copied. Multi-PLY Forms stop errors due to re-copying. Clear legible copies prevent mis-reading of items, figures and amounts. Disputes are reduced. When you stop errors you save time and money, and speed up operations.

The Globe Register Company

DIVISION OF UNITED AUTOGRAPHIC REGISTER CO.

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Factories: Chicago, Cleveland, Oakland, and Cincinnati

GLOBE
Multi-PLY
FORMS

this portfolio of Multi-PLY *forms free to business executives*

Here is a DeLuxe portfolio that you'll be glad to have in your library — at the office or at home. It is full of information concerning Multi-PLY Forms — and contains an assortment of actual samples.

The portfolio is free — and carries no obligation, whatever. Just ask for Portfolio "F."

Off the Record

Day's work

UNLIKE most New Yorkers, Mr. Joseph P. Day, realtor and auctioneer, does not like to take ocean trips. Unlike most millionaires, he never wears an overcoat and usually wears a necktie like Abraham Lincoln's. And unlike most auctioneers, Mr. Day has a habit of halting the bidding in the midst of an auction, stepping down from the platform and disappearing. When he returns, after a few moments, the bidding proceeds with renewed vigor.

It is a rather curious performance which occurs during this interlude. Behind the platform two assistants are waiting for Mr. Day with a large glass of fresh pineapple juice. This he quickly consumes. He is then stretched at full length on the floor with one assistant at his head and the other at his feet. The one grasps his wrists, the other his ankles, and each pulls with all his might in opposite directions. Finally Mr. Day asks them to stop, adjusts his clothes and returns, entirely refreshed, to his auction.

Another whim which Mr. Day indulges is to have all suitable articles of his attire monogrammed in red and gold, the device being a representation of the rising sun. He explains this, genially if somewhat obscurely, by the phrase: "I am the second Day."

Mitchell merger

The first merger ever put through by Charles Edwin Mitchell, of the National City Bank, centered around a mince pie. The merged interests were three: himself, a college chum, and a landlady. As an undergraduate at Amherst, young Mitchell had a good friend whose father made a particularly luscious brand of mincemeat. Young Mitchell was extremely fond of mince pie. He persuaded his friend to have a regular supply of mincemeat sent from his father's factory. He then arranged with his landlady to have this raw material manufactured into mince pie. Of every two pies she made, she kept one, while the other was divided equally between Mitchell and his friend. Thus all three of the merged interests profited by young Mitchell's talent as a promoter.

Mule Trader Harrington

There are times in the existence of every government when it needs mules. When the British Government needed mules during the Boer War it sent to Lathrop, Mo., for them, and a then comparatively young man called "Mule Trader" Harrington supplied them. During the World War the British Government again needed mules and "Mule Trader" Harrington and his partner supplied them again—for approximately $85,000,000. Other Allies also needed the animals and when the war was over Harrington and his partner, J. D. Guyton, were made co-defendants in an income tax suit in which the U. S. Government charged that Harrington's mules had netted more than $10,000,000 in profit. Shortly after the suit Mr. Guyton retired from the mule business and went into banking. He is now a considerable figure in his particular financial world.

"Mule Trader" Harrington did not follow Guyton's lead. He continues to sell mules at the rate of 1,500 to 2,500 yearly to cotton planters, cane growers, and lumbermen in the South. Instead of 50,000 (as was common during the War) now only 450 mules at a time range the 10,000 acres, raise the echo in $50,000 barns, drink from the $100,000 artificial lake. No longer does he keep 100 teams on incessant "K.P." duty, hauling food for the luckier stay-at-homes. But he is nevertheless a highly successful business man. The demand for mules, like the demand for mousetraps, varies from season to season; the important thing is to be ready with the supply.

W. R. Harrington is no sybarite. He loves his mules, says that the instinct which makes it possible for a trader to "spot" a good quadruped is born in a man, cannot be acquired. He works in a little box-like frame office that has a porch across the front, and a pot-bellied wood stove indoors, and for guardian a foxhound "too old to bite." Harrington wears a mud-splattered overcoat as he leads visitors about the place, pointing out to them his costly barns, his lake, his packs of hounds. He rarely travels from Lathrop except to ride on the freight trains with the mules which he delivers.

Brooder

In a huge drawing room near Beverley, Mass., right in the heart of the Antique Belt, stands a cabinet, electrically operated, sound producing, symmetrical, severe. About this device, which might be a radio but is not, are paintings hundreds of years old, tomahawks, arrowheads, peacepipes, other valuable bric-a-brac. At proper intervals, the Thing is opened and from it are removed cheeping baby chicks, dozens of them, eugenically born in surroundings of the most distinguished culture and inspiration.

Guarding them affectionately from the brutalities and disillusionments of the world, hardening them against the days when they must get out and scratch for their living, is Otis Emerson Dunham, president (and owner of all the common stock) of Page & Shaw, Inc. ($6,000,000 of sweets yearly). Mr. Dunham's interest in animal life is not confined to chickens; he also watches over his private herd of reindeer and elk and, it is said, two bison. These he does not shelter in his drawing room, however, but permits to roam about his 110-acre estate.

Goatherd

Book publishers await somewhat breathlessly the development of a scientific brooder for books. They, more than other business men, have to count their chickens before they are hatched, and books are notoriously poor layers. Publishers toss in their sleep waiting for a best-seller to hatch. Many wait year in year out in vain.

Such was the fate of the many-times bankrupt firm of Small, Maynard & Co., in Boston, which lost the fortunes of several successive men.

The last of these was Norman H. White Sr., of Brookline, who as president of Small, Maynard was unable to pay himself as treasurer of the Boston Bookbinding Company for the books he was binding for himself. Aided by his son, Norman Jr., an able editor, he sought a best-seller which would balance his books, found none, voluntarily petitioned in bankruptcy, was convicted on one count on one of eight indictments for theft of $469,000 from Boston banks, was sentenced to three to five years in the State Prison.

Now at the Prison Camp in Rutland, he has found a welcome substitute for the sterile chicks of the publishing house. He has been given charge of the camp goats, at his own request, and has built up from small beginnings a herd of more than a hundred. He has built for them a pen, taught them to recognize his voice, to stand while he milks them. Nightly they fall in line, file past him, give down ungrudgingly their 200 daily quarts of milk.

Gold, paper

After the epic of Coolidge economy, we must expect epics of other lesser economists. Recently a party of guests was invited to William Randolph Hearst's great California ranch. The party was carried from San Francisco to San Luis Obispo in Mr. Hearst's private car. There they were met by a fleet of open and closed Rolls-Royces which conveyed them to the ranch mansion. Ladies' maids and valets, assigned to the guests for the duration of their stay, led the arriving guests through magnificent corridors to their rooms. When the party assembled for dinner they sat down before gold plates, and next to each plate was a paper napkin.

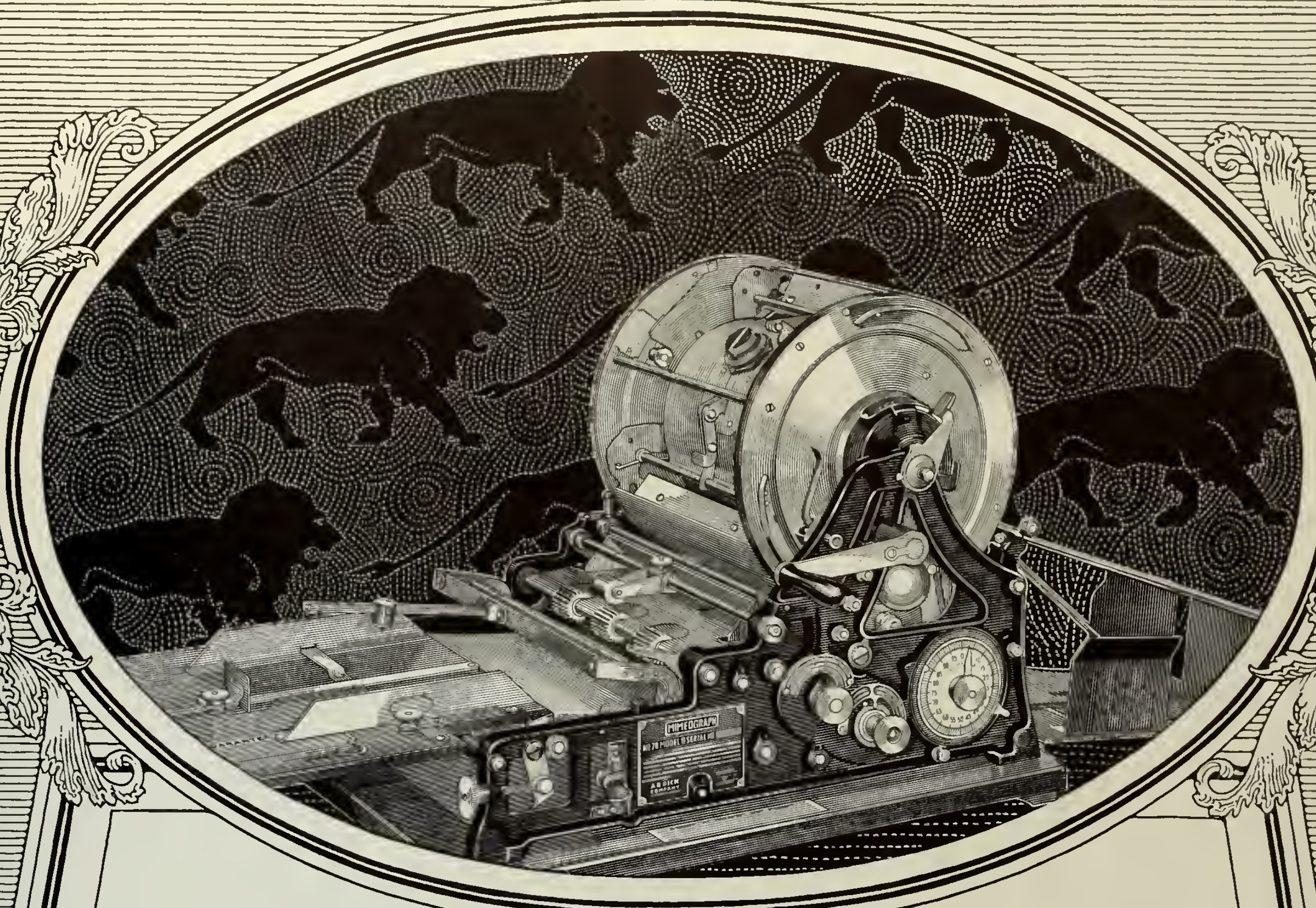
Outright

One man who transacts his business on the floor of the New York Stock Exchange was completely unaffected by the market tail spin of last autumn. He was in the enviable position of holding a corner, being able to sell continuously at undeflated prices, and never on margin.

He is certainly one of the best known men on the floor, although he owns no seat. He has grey hair which is never tousled, wears dark, neat, well-fitting clothes, and habitually carries a handful of quarters which he juggles cleverly, absently, in his left hand.

No one—not even Jake Scherrick himself—

[*Continued on page 26*]



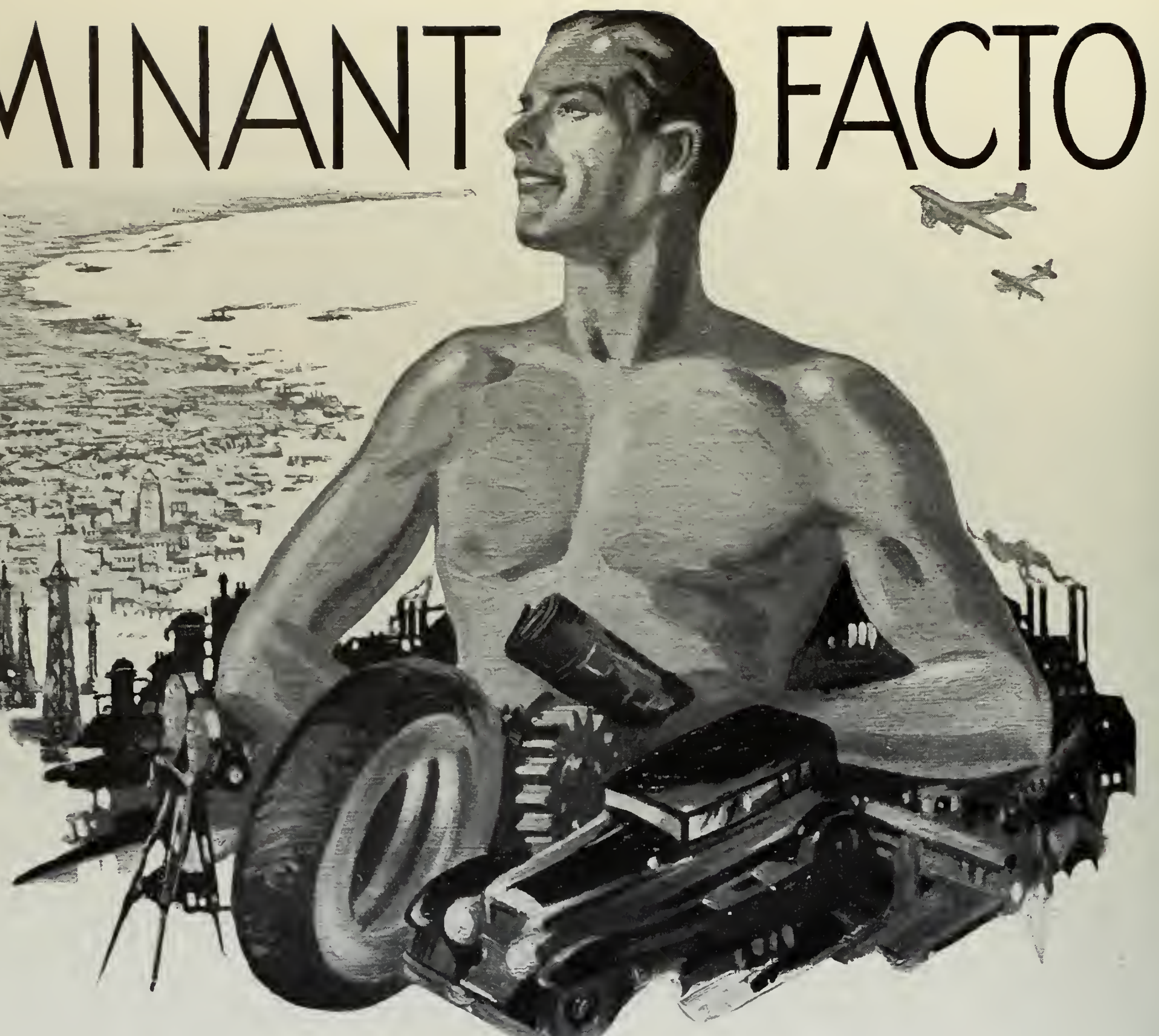
THE MONARCH OF SPEED

It does a lion's share of the world's duplication—is king of the realm where speed, accuracy and economy count supremely—this money-saving Mimeograph of far-flung fame. So easy is it to operate that anyone who has never seen the machine before can learn to handle it competently within a matter of minutes. The only step preparatory to its operation is the typewriting, or drawing, on its famous Mimeograph stencil sheets—the Mimeotype and the new Cellotype. Whatever letters, bulletins, forms, questionnaires, maps, charts, diagrams, etc., are wanted may be had by hundreds and thousands. And the remarkably low running cost is even less today than ever before. Clean-cut reproductions always, in any quantity desired. Privacy for your confidential matters. Write today for full particulars to A. B. Dick Company, Chicago, or to branch offices in principal cities.

MIMEOGRAPH

EDISON-DICK
MIMEOGRAPH
CHICAGO

A DOMINANT FACTOR



Industry in Los Angeles County enjoys these advantages:

* * * *

Year 'round equable climate, providing ideal living conditions and high working efficiency, low building and maintenance costs.

* * * *

Contented Open-Shop Labor.

* * * *

Largest local market and most efficient distributing center in the entire West.

* * * *

Unexcelled transportation, giving favorable access to the markets of the Pacific Coast, to Atlantic and Gulf States and to the undeveloped export markets of the Far East.

* * * *

Abundant industrial power, natural gas and water at low rates.

NATURE'S generosity has had much to do with the tremendous growth of population and industry in Los Angeles County. But there is another vital contributing factor. It is the spirit and vigor of Youth. . . the vibrant enthusiasm for achievement, inspired by opportunity and environment. It is observed and commented on by business analysts and leaders of industry. It is virile...real...tangible.

It has made Los Angeles County the biggest concentrated market on the Pacific Coast. It has given to Los Angeles in 1929 the highest bank clearings of any city on the Western Slope. It has increased industrial production 163 percent and harbor tonnage 6,000 percent in ten years.

It resulted last year in the purchase, in 11 Southern California counties, of 48 percent of all new automobiles sold in the three Coast states. It has caused Los Angeles district to be chosen during the past 24 months as the location for West Coast factories by Goodrich, Firestone, Willys-Overland, Willard Storage Battery, Pittsburgh Plate Glass, Proctor & Gamble, Crane, and National Lead Companies.

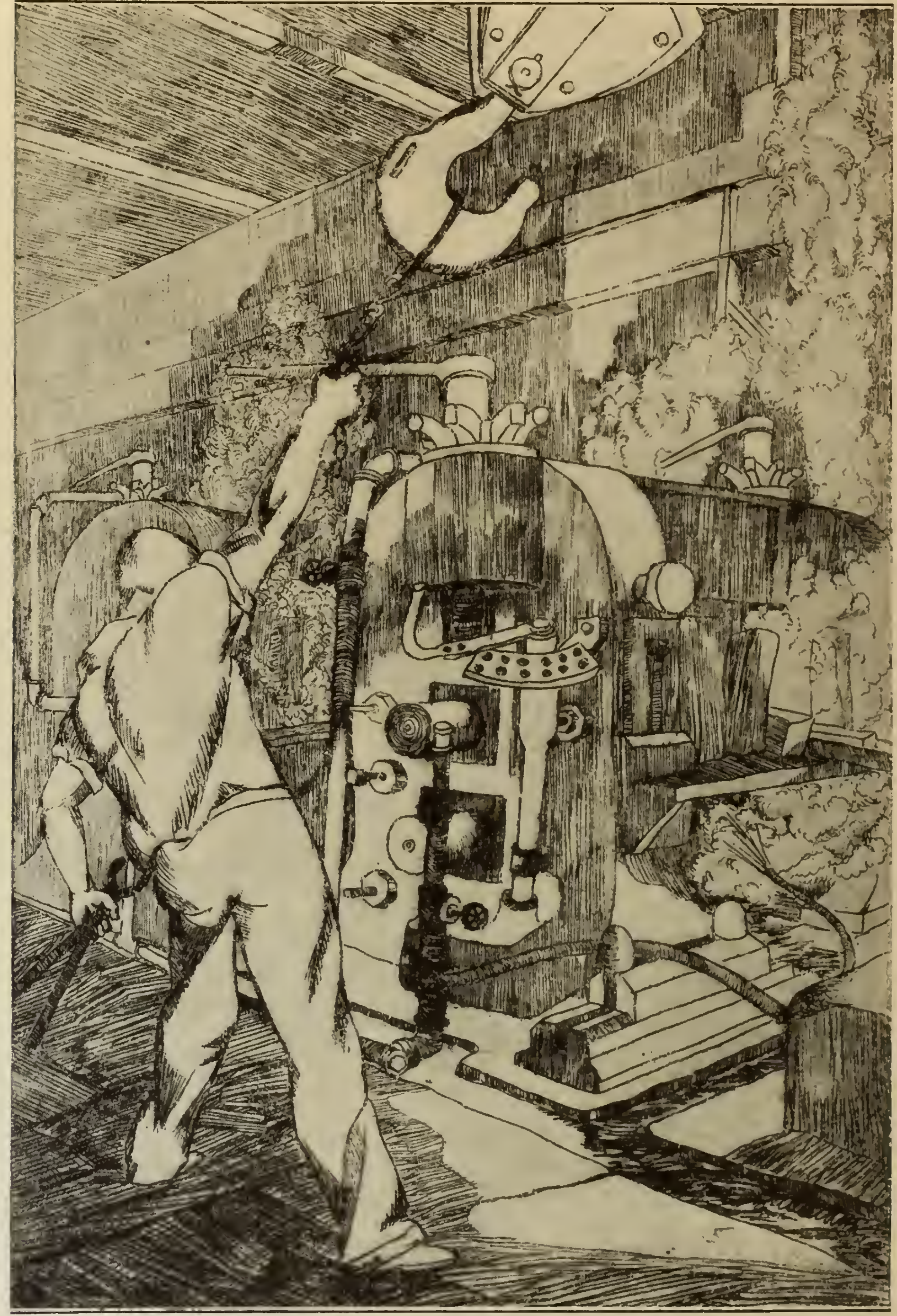
It is a factor to be reckoned with for it cannot be denied its objective. It is the fundamental of success...it is the spirit of Los Angeles County.

Industrial

For specific surveys and detailed information regarding industrial opportunities, address Industrial Department, Los Angeles Chamber of Commerce.

LOS ANGELES COUNTY

IF YOU WANT BETTER LABOR



CLEVELAND'S workers offer exceptional advantages to business enterprises. The supply is ample . . . over 200,000 men and 25,000 women in Cleveland are engaged in manufacturing occupations; over 275,000 men and women are available in Cuyahoga County.

¶ This labor is skilled and versatile, for diversity of industry in many medium size shops has developed ability and initiative in a degree not known where the production line cramps experience.

¶ The standard of intelligence among these workers is high. They think in terms of output and are paid on that basis. They are cheap in cost per unit, not per hour.

¶ Competent organizations assist in their orderly distribution, and so equalize demand with supply. Labor is one of ten important factors in the selection of a business location. For specific data regarding labor supply and cost at Cleveland, address this Bank.

GUARDIAN TRUST COMPANY

CLEVELAND, OHIO

RESOURCES MORE THAN $165,000,000

G. T. Co.

An Equity of $1,300,000

FROM A NEW IDEA—IN A CROWDED FIELD

Established in a Year

YEARS before our business was founded we were convinced that able merchandising was the keystone of marketing, and that without it the force of advertising and selling was dissipated:

In 1926 our search for a new Merchandising Idea in the drug and cosmetic fields resulted in a promising discovery.

Extensive analyses, consumer, trade and technical, were made. In due course we took the idea, the findings and the product to a client, and recommended the formation of a company. Our client formed the company. We acquired a minority interest.

Preparations for sustained marketing began in the summer of 1928. A new package was designed and adopted. The care that went into this detail has paid enormous dividends. Further research, including a test campaign, was conducted.

In the spring of 1929, the New York Metropolitan district was opened. An original sales plan was organized,—old in fundamentals, new in method. A new type of advertising was employed. Sampling was conducted on a scale and in a manner without precedent, yet in harmony with proven principles.

In June, the "Saks Plan"—named from the store which first used it—Saks Fifth Avenue—brought 12,000 women into that store in answer to one message. In view of this response, national advertising in class publications was begun in August.

Within three months, 200 of the best stores in the United States adopted the "Saks Plan", sent 1,500,000 duplicates of the Saks message to their credit customers and brought in 600,000 most desirable prospects to try the product.

Sales multiplied; store displays and selling cooperation beyond our most sanguine hopes followed.

Again, test campaigns were conducted. Four different appeals were given the same chance to produce results. Then the 1930 national plan was formulated. A new system of distribution was instituted with 120 of the foremost wholesalers, who culled from their ledgers the best 25,000 retail drug store names, and organized a follow-up plan for their 1600 salesmen.

In November an extensive trade paper campaign was begun.

On January 10th, national distribution among the 25,000 independent stores and 2,000 chain stores was completed—not by sale—not by consignment—but by the simplest, soundest plan possible.

As planned on July 1st, new prices, making possible a universal market, were adopted on January 1st.

National advertising was scheduled in twelve publications with 16,127,000 circulation, commencing with the February issues.

Daily sales in January ran far above the 1929 peak. The present rate of acceleration is beyond maximum estimates.

Our client's business, with less than one year of active marketing behind it, today represents an equity of fully $1,300,000 . . .

THESE are some of the facts about the development of AMBROSIA, the pore-deep liquid cleanser.

Our part in this work was made possible by a new policy of advertising service conceived in 1923 and made effective a year later when this business was founded:

> *The policy of providing a wholly unbiased, finely balanced service in creative advertising that carries its full share of the load of the sales dollar, and performing all the functions of an advertising agency on a basis which divorces our fee (profit) from variations in the size or allocation of the client's advertising appropriation.*

The AMBROSIA project is exceptional. Few products or ideas possess such potentialities, though many have possibilities that are overlooked. Few agencies have clients of the caliber of the AMBROSIA management, whose imagination and ability made every step possible. But this work does tend to demonstrate what may be accomplished if there is nothing to deflect the agency's interest from whatever course of action is best for the client.

COWAN & DENGLER

ADVERTISING • MERCHANDISING • SALES COUNSEL

NEW YORK

At *the home office of the Insurance Company of North America in Philadelphia, the architects, Stewardson & Page, had accomplished a superb piece of work in Georgian interior design. Pictured at the left is the directors' room, showing the great Danersk table of Duncan Phyfe design.*

"George Washington *and* Lafayette *came to us for insurance policies*

—but that's only part of the story we want our FURNITURE to tell"

BEFORE the Insurance Company of North America was founded, way back in 1792, insurance companies used to operate the fire departments.

It was customary to place a tell-tale mark above the door of every house insured and if the firemen, arriving at the smoky scene of a fire, found this particular house was not numbered among the risks of the company, they would promptly depart.

The first stock insurance company in this country, the Insurance Company of North America, led the way to many important reforms and year after year has added to its reputation for fair dealing.

When its president asked us to provide its offices with furniture, which would convey to their agents and employees as well as to visitors an adequate impression of the staunch integrity of this fine old institution, we weighed the appropriateness of many different periods—and finally went back to the great furniture of Duncan Phyfe for inspiration.

We built the largest Duncan Phyfe table in the world, an oval mahogany piece around which twenty-five people can be seated in roomy armchairs facing each other. Also Duncan Phyfe curio cabinets to enclose rare old ship models, interesting Early American firemen's helmets, and such priceless documents as the policies long ago issued by the company to George Washington and to Lafayette.

We thought it particularly fitting that one room should contain exact replicas of the desk and sofa used by Washington during the term when he presided over the First Congress. In another room, authentic reproductions of the chairs in which the Signers of the Declaration of Independence sat, on the day they penned their courageous defiance to the mightiest nation of those times. Thus room after room was filled with furniture appropriate and significant.

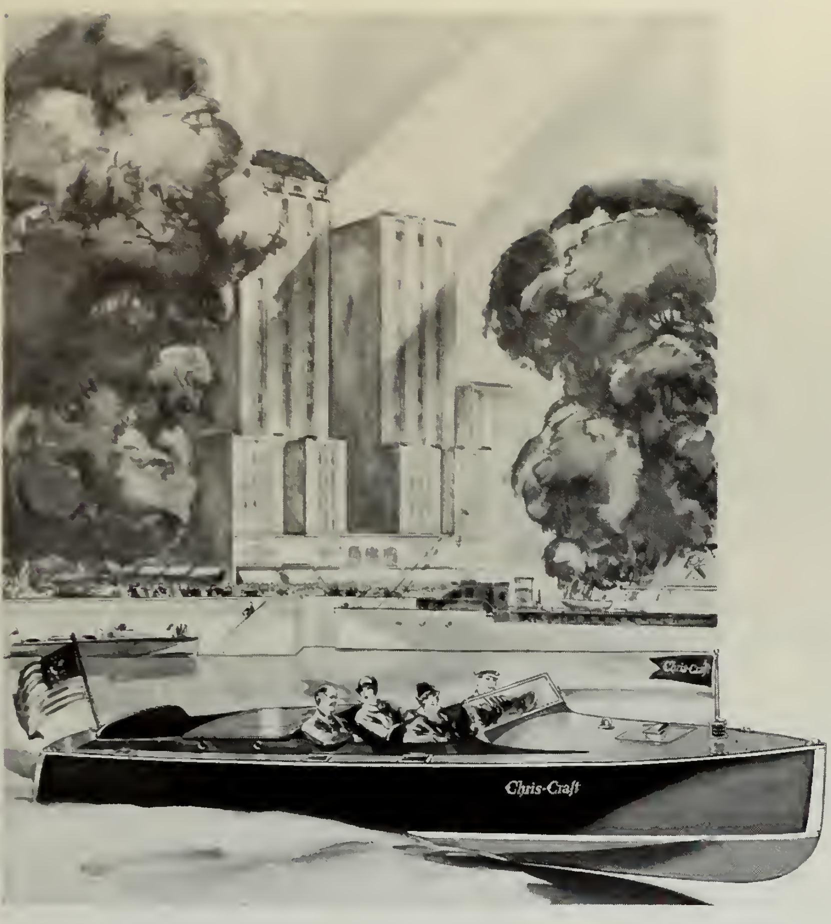
The executives of the Insurance Company of North America have repeatedly volunteered the enthusiastic comment that this meaningful and impressive furniture is successfully creating an atmosphere of authority and dependability.

Why don't *you*, too, enrich your office with furniture that will do justice to the personality of your business and the high character of your business methods? We carefully work out such problems with the architect, and with the officers of large institutions, and we take the same interest in furnishing a small individual office. We should be glad to have you write to us, telling of the problems presented by your own office.

DANERSK FURNITURE

ERSKINE-DANFORTH CORPORATION—*Designers and makers of choice furniture*

NEW YORK: 383 MADISON AVENUE CLEVELAND: 1129 EUCLID AVENUE CHICAGO: 620 NORTH MICHIGAN AVENUE
DISTRIBUTORS—BOSTON: 132 NEWBURY STREET—LOS ANGELES: 2869 WEST 7TH STREET



A TREASURE chest of bountiful health lies open to the Chris-Craft owner. Life on the water offers a multitude of thrills and pleasures not known on land.

The 20-foot all-mahogany Chris-Craft runabout is priced at $1895; the 22-foot runabout at $2195 and $2595.

One may splash about at the swimming raft, take dinner at the distant yacht club, then swing past a dozen miles of shoreline to evening social affair in remarkably short time.

Chris-Craft days are full of joy. Go fishing, step out and win a race, entertain guests in delightful comfort, or just loiter among wooded islands. A whole new range of pleasures begin at the water's edge and all are spread before the Chris-Crafter for his choice.

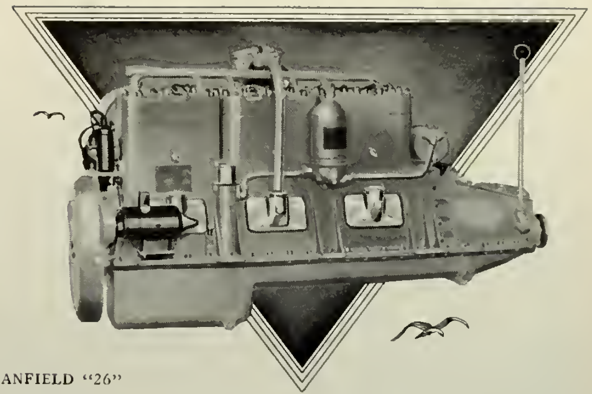
Distinctive among the 24 models of the 1930 Chris-Craft fleet are the 20 and 22-foot runabouts. They are luxurious, deep-cushioned, 9 passenger Chris-Craft. They go like the wind, yet are easily controlled by boy or girl. They start, stop, steer turn and reverse like an automobile, yet they are infinitely more flexible.

Priced at $1895, the 20-foot Chris-Craft runabout is the lowest priced Chris-Craft ever offered. The 22-foot Chris-Craft is listed at $2195 and $2595, offering a life-time of dependable water transportation.

Illustrated catalog may be had by writing Chris Smith & Sons Boat Co., 123 Detroit Road, Algonac, Michigan.

24 CHRIS-CRAFT MODELS
Runabouts—Sedans—Commuters—Cruisers—Yachts
20 to 48 feet—$1895 to $35,000

Chris-Craft
World's Largest Builders of
All-Mahogany Motor Boats



BANFIELD "26"
CHRIS-CRAFT*
6 Models
CORSAIR "36"
GAR WOOD "40"
HACKERCRAFT*
MATTHEWS*
MINETT-SHIELDS
NORTH STAR
ROBINSON SEA GULL
(Twin Installations)
SEA LYON "40"*
STEPHENS
WHEELER "PLAYMATES"*
Foreign
BRITISH POWER BOATS
OSBORNE-CRAFT
(ENGLAND)
CLAUS-CRAFT (GERMANY)
DESPUJOLS (FRANCE)
*Optional

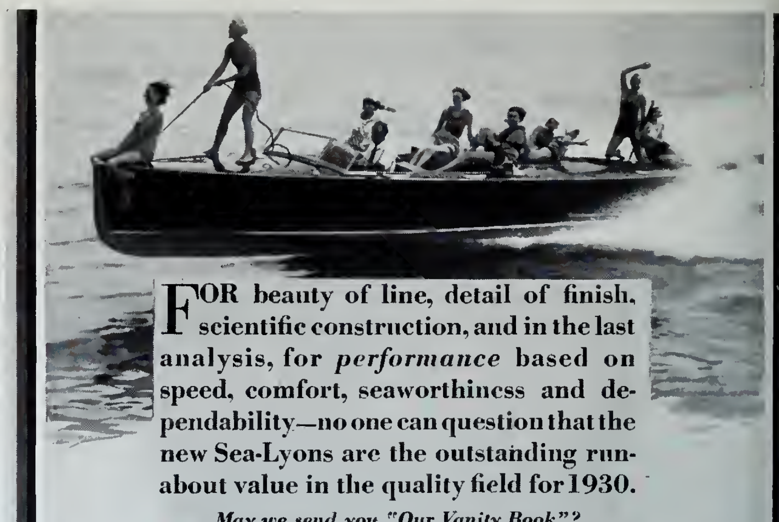
SCRIPPS
Powered

The wide acceptance of SCRIPPS is best expressed by the ever growing list of standardized craft offered with SCRIPPS as standard or optional equipment.

Ten models—15 to 200 Horse Power.
High speed and medium duty.
Interesting literature will be mailed upon request.

SCRIPPS MOTOR CO., 5844 LINCOLN AVENUE, DETROIT, MICH.

SCRIPPS
• THE MOTOR THAT CROSSED THE ATLANTIC •



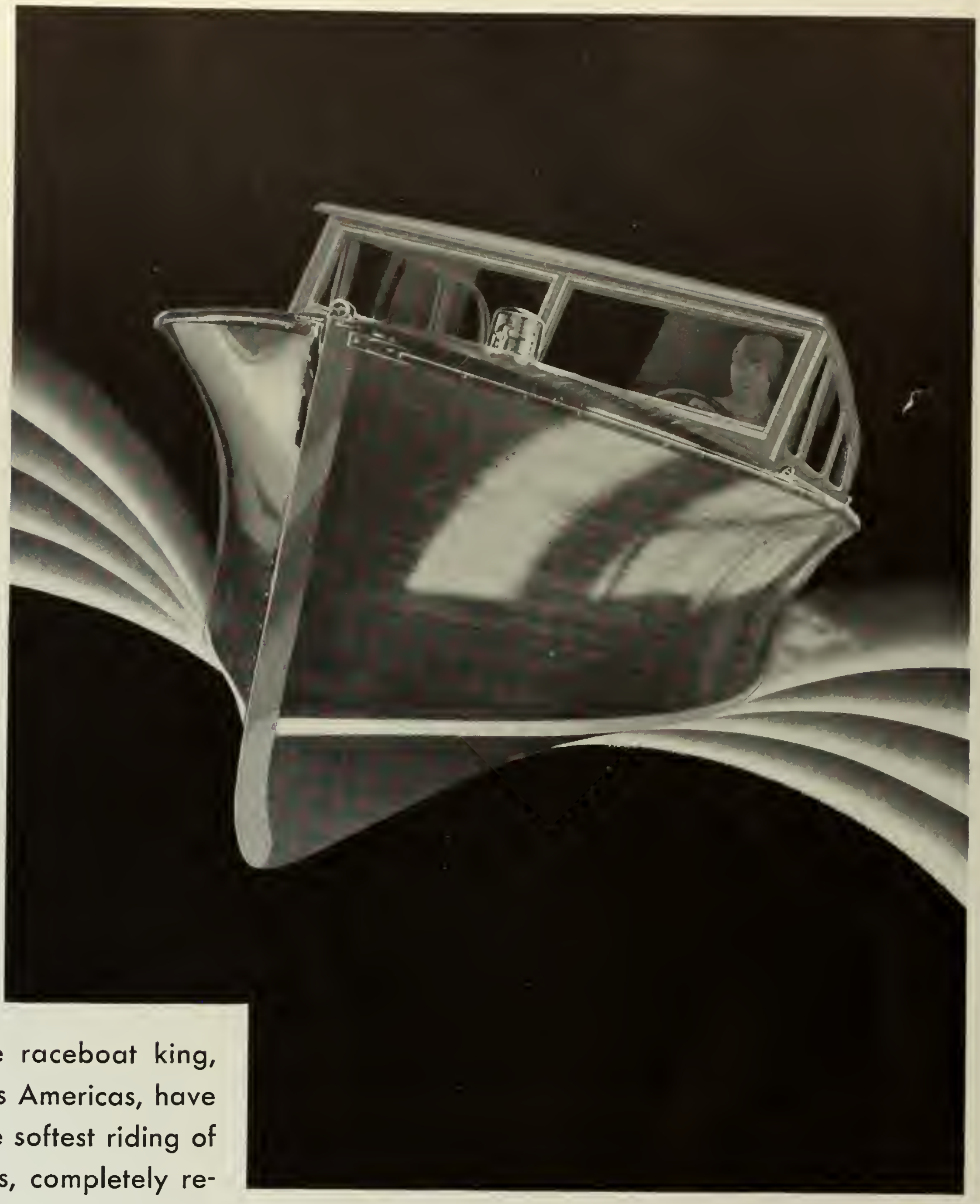
FOR beauty of line, detail of finish, scientific construction, and in the last analysis, for *performance* based on speed, comfort, seaworthiness and dependability—no one can question that the new Sea-Lyons are the outstanding runabout value in the quality field for 1930.

May we send you "Our Vanity Book"?

SEA LYON "30" . . .	$2,675
SEA LYON "35"	2,975
SEA LYON "40"	4,650
SEA LYON "45"	5,950
SEA LYON "46"	6,500
SEA LYON "60" . . .	12,500
COMMUTER	30,000

SEA-LYON

A limited number of excellent sales territories available
HOWARD W. LYON, INC.
HOTEL BARCLAY • 532 LEXINGTON AVE., at 48th ST. • WICKERSHAM 6432-3 • NEW YORK



Recognition for THE MAN WHO KNOWS HIS BOATS

Pleasure craft from the shops of the raceboat king, that are built side by side with the Miss Americas, have always had the reputation of being the softest riding of all speed boats. And the 1930 models, completely redesigned, attain new heights of riding and driving ease, represent new triumphs in beauty and luxury.

Equally desirable, perhaps, ownership of a Gar Wood boat identifies to the world of thorough-going sportsmen, the man who "knows his boats".

Everywhere you hear men (and women, too, of course) saying, "I have a Gar Wood" with exactly the same prideful inflection they would employ in remarking, "Yes, this is a Stradivarius."

So, you owe it to your sporting self to introduce your weather eye to a pleasurable new sensation. Here, in glistening mahogany and chrome-plated bright work, is the master interpretation of what a boat can be!

Ten New Models—30-55 m. p. h., $3,150-$12,950

GAR WOOD INC.

THE GREATEST NAME IN MOTORBOATING

415 Connecticut Ave., Detroit, Mich. 1860 Broadway, New York City

……

Gar Wood, Inc.,
415 Connecticut Ave., Detroit, Michigan

Gentlemen: I shall be glad to have your booklet on the 1930 Gar Wood Boats—without obligation, of course.

Name______________________________

Street or R. F. D.______________________________

City or County__________________ State____________ F-3-30

GENTLEMEN'S

Kashmir Coats

FOR TRAVEL, MOTORING
AND COUNTRY WEAR

Kashmir, the most practical, comfortable and fashionable of coating fabrics for travel, motoring or country wear, is presented by us in the correct double-breasted Polo model

The extensive experience of Hickey-Freeman in tailoring this notable fabric enables them to produce for us coats of the highest character

F.R. TRIPLER & CO.

Outfitters to Gentlemen · *Established* 1886

MADISON AVENUE AT 46 STREET

New York

will tell how it comes that he is allowed to sell *boutonnières* to the traders, rent binoculars to the gallery visitors, and variously ply his trade within the sacrosanct precincts of the Exchange. Perhaps no one knows. Perhaps Jake Scherrick fears that too much curiosity might awaken some long dormant rule. At all events, this lone Stock Exchange merchant goes his way unmolested, unostentatiously jingling his handful of quarters, thinking no one knows what thoughts about his madly scrambling neighbors.

Cabala

Casual as are the ways of the New York financial reporter, he shares with all reporters a consuming desire to break into the front page. This can most readily be done by working into his stories on every possible, and many impossible, occasions the great name of John Pierpont Morgan. The Hearst papers are especially fond of bolstering up their financial news by references to Morgan, the Great Banker. For some time readers of the Hearst New York *American* have been impressed by the classic initials, "J. P. M.," signed to a daily column of stock market gossip. As every New York journalist knows, but as every reader of the *American* does not know, "J. P. M." stands for James P. Maher, shrewd, lanky, genial financial editor of the *American*, who answers telephone calls with a hearty, "Jim Maher speaking . . . " His distinguished initials have their value. To naïve readers they no doubt summon up a picture of Mr. Morgan at his desk in 23 Wall Street, laboriously composing his daily tipster column for the *American*.

Hatless head

The hats of Mr. William G. Clyde, who heads the Carnegie Steel Co., observe the normal variations of the season. In winter Mr. Clyde's derby is seen in Pittsburgh's Atlantic Street. In summer, a soft and expensive Panama makes its appearance. But never, it is said, do any of Mr. Clyde's hats find their way to Mr. Clyde's head. Whatever the weather, be it a hailstorm or 100° temperature, Mr. Clyde walks hat in hand. The habit has its advantages as well as its dangers. He is never unintentionally rude to friends encountered on the street. He is relieved of the necessity of constantly tipping and removing his hat, a release which dwarfs such incidental inconveniences as pneumonia and sunstroke.

Coast joke

In 1923, Mr. Kenneth R. Kingsbury, president of Standard Oil of California, was on his way east across the continent. At the first station, a bag of onions was delivered to him. At every stop thereafter, he received another bag of onions, all gifts from his good friend Herbert Fleishhacker, San Francisco banker.

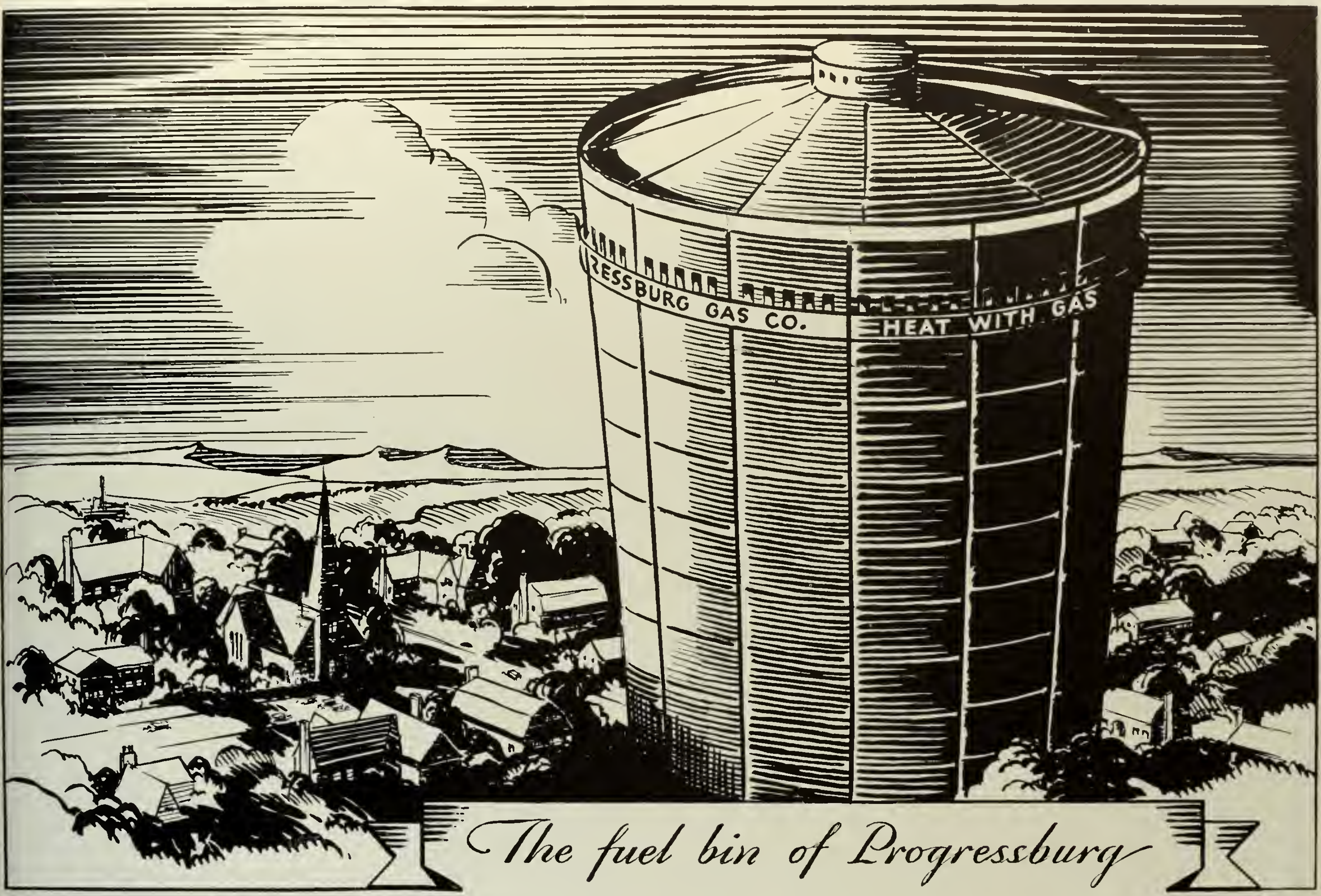
This pungent jest Mr. Kingsbury did not forget. Not long after the onion episode, a liveried bugler appeared at the door of Mr. Fleishhacker's bank (the Anglo & London Paris National). The bugler preceded and announced two water buffaloes and several crates of lesser animals. All had been sent C.O.D. by Mr. Fleishhacker's good friend, Mr. Kingsbury.

Parsons' fan mail

To the veteran writers of the *Saturday Evening Post* comes nearly as much fan mail as arrives at the gilded mail box of a Hollywood star. Some of it is crank mail, full of complaint; some is extraordinarily acute. Mr. Floyd W. Parsons, who contributes much of the *Post's* quasi philosophical, quasi scientific folklore, tells of receiving ten letters correcting his measurement of the diameter of a human hair. The fault, by the way, did not lie with Mr. Parsons but with the G. E., who made a slip of 1/10,000 of an inch.

Mr. Parsons has many interests outside of human hair. As editorial manager of Robbins Publishing Co., he contributes a bimonthly department, "Everybody's Business," to *Advertising & Selling*. Of himself he will say that he started the Florida fashion of running around naked, and that he has favored the *Post* with more than 400 dissertations. Of the 400, one was returned because it conflicted with the *Post's* advertising policy; one was returned for revision because it offended the *Post's* meat-packer friends. The rest Mr. Lorimer sent to press without dotting an "i."

These triumphs Mr. Parsons will recall without reluctance, adding candidly: "I tell the truth as I see it." He sees much truth, distributes it freely.



The fuel bin of Progressburg

GOOD WILL DESERVEDLY EARNED

TENS of thousands of homes are today being heated—evenly, cleanly, conveniently—by equipment designed solely to burn gas.

This newer utilization of gas has increased the revenue of progressive Gas Companies and—equally important—has enhanced their standing in the community.

The added sales of gas, due to the installation of Bryant Heating equipment during 1929 alone, amounts to four and one-half billion cu. ft., enough to supply the city of Minneapolis for one year. » » » » » » » » » »

The completely satisfied user of gas heating—invariably an influential citizen—now looks with friendly eye toward his Gas Company, whence he receives a valuable and highly appreciated service, attainable from no other source.

Larger gas production is tending to lower its cost; better public relations are lowering the cost of selling gas.

These economies are benefiting the customer and shareholder alike.

A brilliant future awaits the industry.

THE BRYANT HEATER & MANUFACTURING CO.
17881 ST. CLAIR AVENUE · CLEVELAND, OHIO

BRYANT GAS HEATING

...lets your pup be your furnace man

© B.H.M.C

A REVIEW *of the*

Stock and Bond Market

is issued by us each month and mailed to nearly 65,000 investors throughout the United States. Each issue contains an analysis of four well-known listed stocks, together with current information of interest to bond buyers.

If your name is not on our mailing list, write on your letterhead to our nearest office for a copy of the current issue

HORNBLOWER & WEEKS

ESTABLISHED 1888

BOSTON NEW YORK CHICAGO CLEVELAND
DETROIT PROVIDENCE PORTLAND, ME. PITTSBURGH

Members of the New York, Boston, Chicago, Cleveland, Pittsburgh and Detroit Stock Exchanges and the New York Curb Exchange

Tailoring to Tycoons

Accredited supremacy in the art of putting individualism into gentlemen's attire for all occasions.

Alfred Nelson Co

Established 1888

580 FIFTH AVE. NEW YORK

Statistics

Wealth of the Sea

WHILE scientific pessimists have been calculating the date of the ultimate exhaustion of the world's natural resources, their optimistic colleagues have been busy hunting for new treasure houses. One of them thought to look, so to speak, down the drain. He found in the world's catch basin, the ocean, wealth so great that it cannot well be calculated. From time beyond the calculation of geologists, the gentle rains from heaven have been carrying into the sea billions of tons of mud each year. Submarine volcanoes and fissures have for ages past belched into the ocean minerals from within the earth. Now the ocean bed is a huge deposit of insoluble natural wealth; the 331,522,100 cubic miles of sea water hold in solution or suspension yet other hoards.

One cubic mile of sea water (4,160,000,000 cubic meters; 4,710,000,000 tons) contains:

Salt	123,173,230 tons
Magnesium chloride	17,930,970 tons
Magnesium sulphate	7,809,180 tons
Calcium sulphate	5,934,600 tons
Potassium sulphate	4,064,730 tons
Calcium carbonate	579,330 tons
Magnesium bromide	357,960 tons
Dissolved organic matter	141,300 tons
Fluorine	1,374 tons
Barium	916 tons
Albumen	2,800 tons
Iodine	100 to 12,000 tons
Arsenic	45.8 tons
Silver	45.8 tons
Gold	18.84 tons
Radium	4.8 grams

Science has not yet found a way to dissociate these mineral and organic treasures from the tremendous mass of water that surrounds them. But meanwhile, sea plants and animals are doing it, and science may learn from them how it may be accomplished. Seaweeds and sponges have much higher concentration of iodine than the water in which they live. Sponges, coming from sea water of 2,380 parts of iodine per billion parts of water, themselves contain 3,870,000 parts of iodine per billion parts of water; lobsters, 11,590. Very little strontium can be detected in sea water, but the skeletons of certain microscopic marine plants are nearly pure strontia. Oysters collect manganese and copper. Certain other curious animals in the sea collect vanadium, nickel, cobalt, lead, and arsenic. And if science cannot learn from these animals how the distillation or concentration is accomplished, perhaps these organisms can be harnessed to do the work for us.

The ocean floor has been receiving insoluble deposits for ages. In its abysmal basins there lie 275 thousand million tons of nitrate and 75 thousand million tons of phosphate. Iron, alumina, lime are abundant there. Manganese, becoming scarcer on land, occurs on the ocean bottom as nodules of highly concentrated manganese dioxide—no one knows the tonnage. Elements whose chlorides, oxides, sulphides, carbonates, and phosphates are insoluble in water must exist in vast quantities in the ocean bottom mud. These include silver, whose chloride is insoluble, and most of the heavy metals.

As a manufacturer of organic or living substance, the ocean is equally impressive. Of the 92 chemical elements, 34 besides the inert atmospheric gases have been definitely found in sea water. These include all those which are known or suspected to be necessary for life. (Known to be necessary: oxygen, hydrogen, carbon, nitrogen, phosphorus, sulphur, iron, calcium, magnesium, sodium, potassium, manganese, chlorine. Necessary for some forms of life: iodine, copper, strontium, vanadium, boron, silicon. Suspected: zinc, cobalt, nickel, arsenic, fluorine.) Energy is required for the manufacture of organic matter by plants. Of the radiant energy of sunshine, the ocean receives 70.73 per cent of the earth's quota. This is absorbed by microscopic plants, which are estimated to grow wet vegetation to the extent of 4,000 tons per square mile of surface of sea per year in the English Channel. Expressed in terms of dry sugar, the manufacture of food by plants is equivalent to 715 tons per square mile per year in the English Channel. A small part of this vegetation becomes animal substance via food supply. The world production of fish useful to man is, partly known and partly estimated, 27,295,606,300 pounds annually, valued at $1,018,303,000, of which amount

. . . THE UNIVERSITY OF LIGHT

High on the hills east of Cleveland, Ohio, looking out across a teeming city, is Nela Park—Lighting Headquarters of the World. Here, surrounded by great trees and broad expanses of lawn, suggestive of a college campus, the scientist works in his laboratory on tomorrow's light. Here, the illuminating engineer plans lighting for increased productivity, improved products and greater safety. Here, comes the world to learn what is new in illumination for better merchandising, eye conservation, comfort, beauty and health, as shown by the Nela School of Lighting. Here, in the shadow of the greatest name in electricity, are formulated the ideals of quality and service of a great product. National Lamp Works of General Electric Co., Nela Park, Cleveland, Ohio.

GENERAL ELECTRIC
MAZDA LAMPS

Join us in the General Electric Hour, broadcast every Saturday at 9 p. m. E. S. T., on the Nation-wide N. B. C. Network.

An impression of stability and resources was what led you to your bank. Surely that impression is important enough to be reflected in your checks.

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LA MONTE
NATIONAL SAFETY PAPER
FOR CHECKS

the United States produces 3,000,000,000 pounds; Canada, 1,075,000,000; England, 1,698,830,000; Norway, 1,758,000,000; Siam, 2,000,000,000; Japan, 5,700,000,000. No use is now made directly of plankton or microscopic vegetation, but the amount of this is vastly greater than that of fish. Plankton or microscopic plants contain 10 to 13 per cent albumen, carbohydrate varying from 20 to 80 per cent, fats 1.3 to 2.3 per cent. Substance of this composition should be valuable for direct feeding of land animals.

As a source of power, Georges Claude has shown that a vast amount of power is available from the sea if advantage is taken of the difference in temperature between top and bottom of ocean in the tropics. Since the ocean's abyssal water is always near the freezing point, there is a superabundance of refrigeration to supply the whole world forever.

Exploitation of the ocean resources may be distant, but it is not fantastic. We are exploring Antarctic wastes, making rockets to shoot across the ocean, perhaps at the moon. We are beginning to make useful things from corn stalks. The ocean is at our door.

What few children know

About soft drinks . . .

In 12,000 bottling works in 1929, 120,000 employees made 120,000,000,000 bottles of soft drinks which were sold to thirsty U. S. citizens for $650,000,000. Into the making of this effervescent ocean went 300,000 tons of sugar.

About razors . . .

Early in January of this year, the 115,272,539th (and last) old model Gillette safety razor was delivered. Redesigned machines will turn out new razors, new blades, the latter at the rate of 2,700,000 a day.

About eagles . . .

Since the outbreak of the World War, Alaskan authorities have bought more than 35,000 pairs of talons, evidence of the killing of as many bald eagles, at a dollar a pair. The bald eagle is no welcome visitor to fox farms, salmon fisheries; hence, a bounty. There is no danger at present that the species will become extinct.

About beauty . . .

Women of the United States spend nearly $2,000,000,000 yearly in the quest of beauty; they lavish $400,000,000 of this in 34,000 beauty shops, where 140,000 persons are employed. And a great many of them find time to visit the 80,000 barber shops which the American male requires.

What a child may know

About automobiles . . .

In 1929 the automobile industry used the products of other industries to the following extent:

Product	*Percentage*
Rubber	85
Plate glass	67
Iron and steel	19
Copper	15
Lumber	18
Lead	27

About radio . . .

In 3,900,000 U. S. homes, new radio sets were installed during 1929, not including 218,000 radio-phonograph combinations. These new sets, together with parts and accessories for old ones (e.g., 71,000,000 tubes), were responsible for a retail business of $805,328,000.

About U. S. exports . . .

For the first time since 1921, the United States last year exported goods to a value in excess of $5,000,000,000. The year's total of $5,284,000,000 exceeded the exports of Germany by three quarters, of the United Kingdom by one half.

About Bibles . . .

The Bible, the world's best best-seller, is printed in 623 different languages and dialects. The British and Foreign Bible Society alone publishes 12,000 per day; has distributed more than 237,000,000.

About cigarettes

If American cigarette manufacturers applied themselves to the problem, without increasing their current rate of production (106 billion per year), they could, between Christmas and Christmas, make a package of 20, each of which would reach from the earth to the moon.

John Stillman

WHEN HORIZONS STAND ON END

TO the manufacturer also comes the illusion that industrial horizons are up-ended as markets and methods of manufacturing shift their positions.

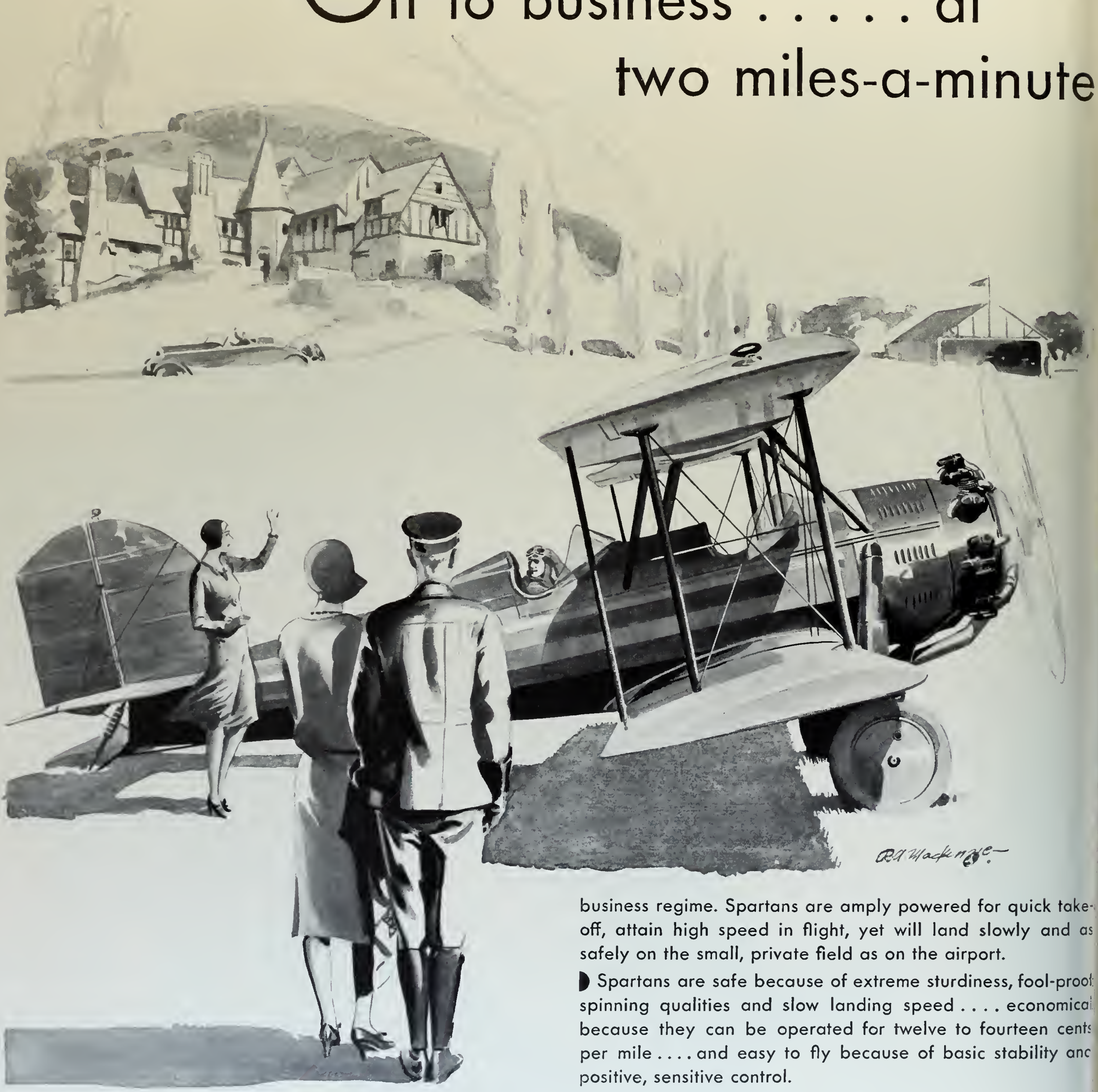
This is the natural outcome of the urge for speed, for low cost and volume production, but it brings new problems and intensifies old ones which impel the manufacturer as never before to seek the guidance of research and the assistance of the Engineer in synchronizing all the forces of production through improved plant layout, machinery arrangement or reorganization and the co-ordination of all operations—even to items of labor policy, handling and remuneration.

We have seen such a course lead to more profitable operation for some of our clients. Perhaps it would do so for you. It should be worth discussing.

J. E. SIRRINE & COMPANY
Engineers
Greenville South Carolina

ENGINEERING CONSULTANTS ON THE SOUTH

Off to business . . . . . at two miles-a-minute



HUNDREDS of successful, ever-energetic American executives have found in the airplane an indispensable business ally. Modern men whose affairs require their presence at several distant points in one day—or many places in a month—have turned with a sense of deep appreciation to private air travel.

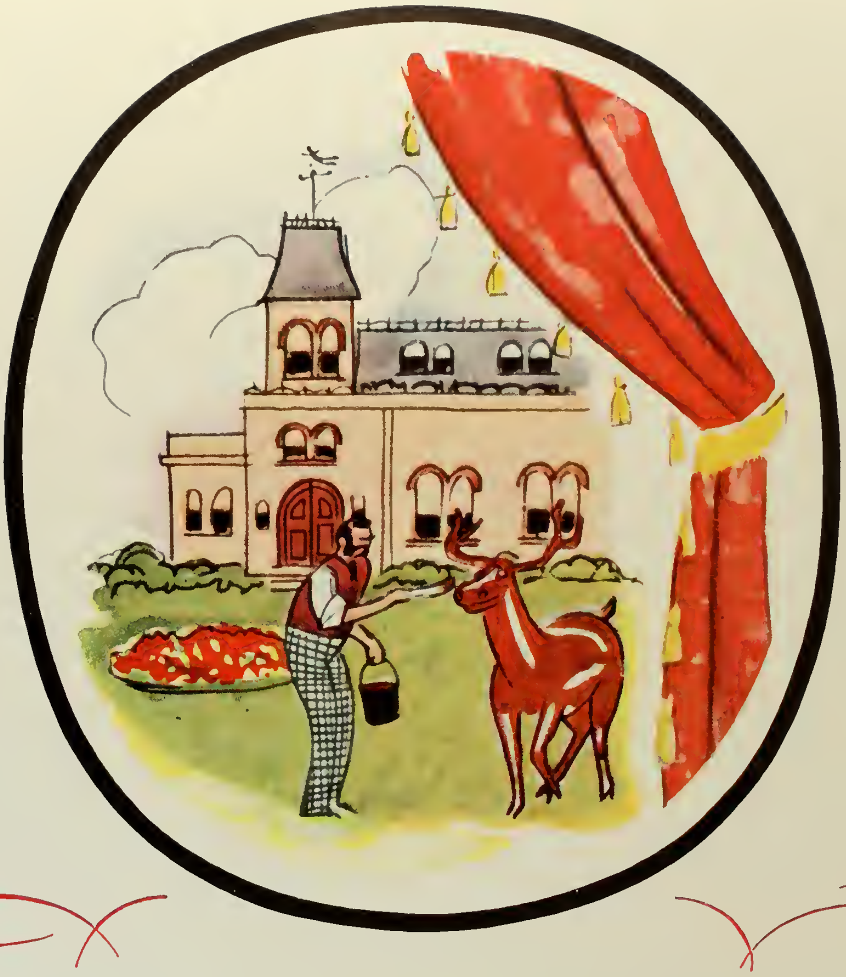
◗ Spartan builds airplanes exactly suited to this aggressive business regime. Spartans are amply powered for quick take-off, attain high speed in flight, yet will land slowly and as safely on the small, private field as on the airport.

◗ Spartans are safe because of extreme sturdiness, fool-proo spinning qualities and slow landing speed . . . . economica because they can be operated for twelve to fourteen cent per mile . . . . and easy to fly because of basic stability anc positive, sensitive control.

ILLUSTRATED BROCHURE SENT ON REQUES

Spartan biplanes are offered with the choice of two engines: The 225 h. p. Wright "Whirl wind Seven" and the 165 h. p. Comet. Special equipment of each model includes dua controls, metal propeller, booster magneto, gasoline gauge, air-speed indicator, oleo gear, 30 x 5 Bendix wheels and brakes, adjustable stabilizer, navigation lights. Prices range from $7750 to . . . . $5675 fly away Tulsa

SPARTAN AIRCRAFT COMPANY • TULSA, OKLAHOMA



WHEN WE DROPPED THE CANNAS AND IRON STAG

About 1900 father gave the iron stag his last coat of brown paint.

Somehow, although that stag was good as new, he seemed to have lost his job.

Once he stood for wealth and good taste—a badge for the public o admire. But the world grew full of a strange unrest. People were even saying things about the ways cannas should be planted—if at all. Some began to hunt old houses and ive in them.

But still they sought the some-hing the brave old stag and the brilliant cannas stood for. Some-hing in the garden to tell the pass-ng public of their good taste, their prosperity, their knowledge of grace-ul living. Something subtler—garden walks edged with larkspur and foxgloves—gnarled old apple trees carefully patched and mended—new-old ways of saying: "Here is a better home."

Today in a million gardens the old-fashioned flowers beckon to business. In great homes and small they are the badge of buying power.

Every year since 1922 the circulation of Better Homes and Gardens has grown faster than that of any other home magazine in America. Now it reaches a million, three hundred and seventy-five thousand families—85% of whom own their own homes.

77% of these homes are in cities, towns and suburbs within the retail trading areas of cities over 25,000. This single circulation—far larger than any other in the vitally interesting garden-making and home-owning field—covers better than one in every seven of all the owned urban homes in America.

"How-to-do-it" advice on gardening and home-making, on foods and hobbies, created this great circulation with its high buying power. No fiction—no forcing methods. Just natural healthy growth. For a real vogue is upon us—a vogue for better homes, better gardens.

BETTER HOMES AND GARDENS

DES MOINES, IOWA

CAUSE

It is characteristic of the forward-looking organization to seek to excel not only others but itself.

Thus, contemplating two years ago a proper celebration of Goodyear's Thirtieth Anniversary, Goodyear men set out to build the finest tire the world had ever seen.

Upon this task they focused the abilities of the largest and most experienced production and development departments in the rubber industry, striving regardless of cost for the tire that undeniably should be the masterpiece.

How well they succeeded has been revealed since in the Goodyear Double Eagle, which is, and always will be, our highest expression of that quality which protects our good name.

P.W. Litchfield

President

GOOD

Volume 1

Fortune

Number 2

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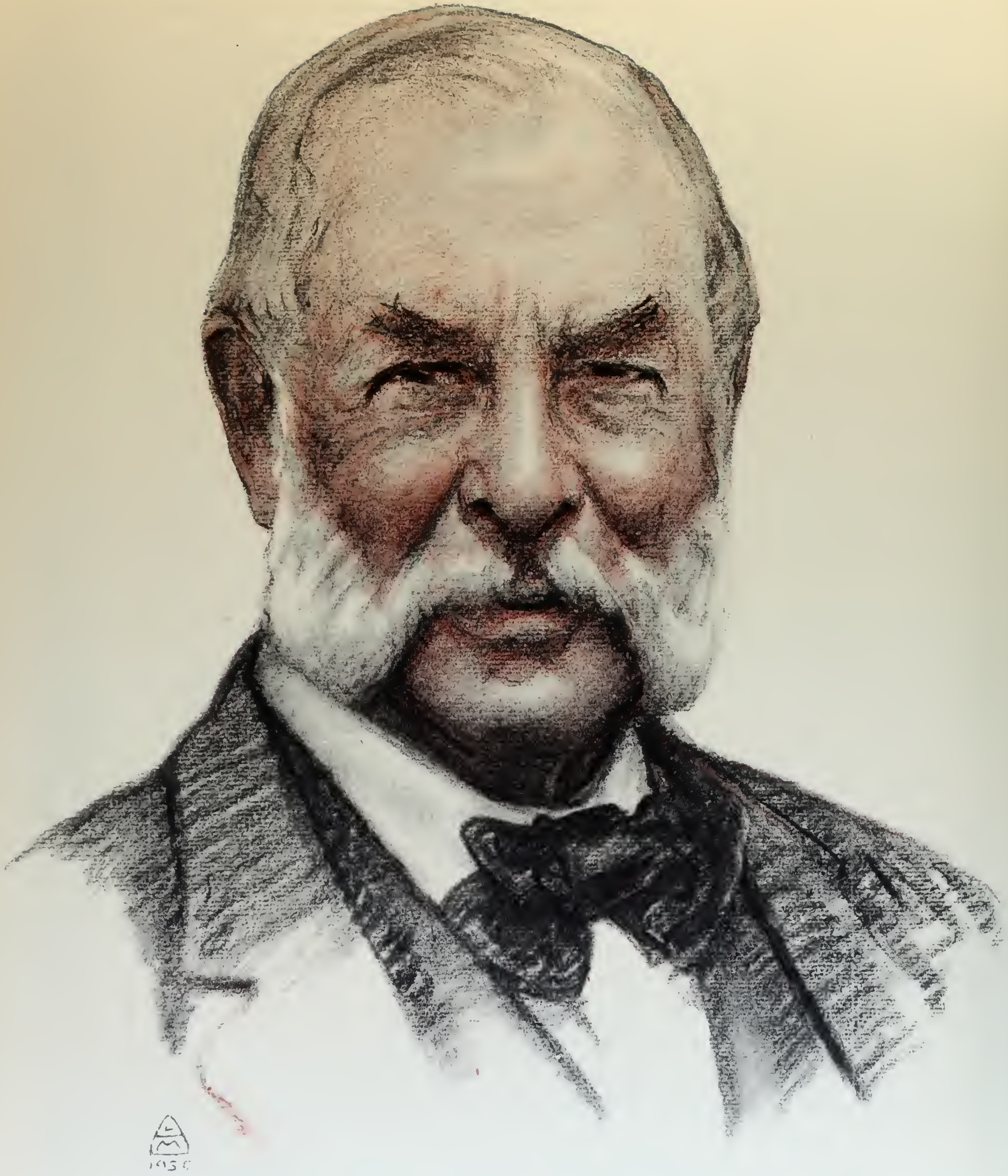


THE FOREMOST AMERICAN BANKER ENDS HIS NINETIETH YEAR
MR. GEORGE F. BAKER—*BY LEO MIELZINER*

BURLINGAM
PUBLIC
LIB

Railroad Consolidations, Old and New

An estimate of the value of the continuing Principle, together with a brief urvey of the current Plan.

MR. WILLIAM H. WILLIAMS, quoting Virgil earnestly to an audience of traffic men gathered at St. ouis, seemed to forecast an event which was to come two onths later. "Oh my companions," apostrophized Mr. Villiams, "you who have suffered graver ills—for we are not nmindful of the trials through which we have passed—the ods will give an end to these things also." This was last Octoer, and in December the Interstate Commerce Commission nnounced a Final Plan of Railroad Consolidation, in which Ir. Williams discovered that the Wabash, of which he is hairman, was suddenly elevated to a position beside the raiload powers of the very first rank. Whatever had been the rials of Mr. Williams and the Wabash, this might have seemed n acceptable End.

Actually, Mr. Williams knew very well that instead of havng reached an End, he had but come to another Beginning. he problems of railroad consolidation, already dragged hrough a decade of costly controversy, were little nearer soluion in December than they had been in December, 1928, or n December, 1921. Since the passage of the Transportation ct (1920), the eleven members of the Interstate Commerce ommission have held hearings in every corner of the counry. Upon them have been spent hundreds of thousands of ollars of the Government's money and untold amounts of the ailroads' money. To them have come hundreds of lawyers, undreds of accountants, hundreds of railroaders. To them ave come the nation's greatest bankers and most powerful xecutives. As a result of their maneuvers, consolidation plans ave come and gone: the plan devised by William Zebina ipley (1920) was modified (1921) into the official Tentative lan, while the trunk lines produced in 1926 their own Four arty Plan. Now, at length, founded on ten years of plans and ounterplans, appears the Commission's Final Plan. Already t is bitterly attacked; already the difficulties in its path seem remendous, perhaps insuperable.

Vhy consolidate?

So difficult, so costly is this business of consolidating the ation's 1,000 railroad companies into a few great systems hat one should be certain of the merits of the Principle before ondering too closely the merits of this or that Plan. Since the .C.C. made public its last proposal, several voices have been ifted in pointed query. Commissioner McManamy doubts if 'under present conditions the consolidation provisions would ave become part of the law," urging that "never have the ailroads collectively or singly been in such good condition as hey are now." And Commissioner Eastman himself notes a endency "to magnify beyond reason the possible advantages, o overlook . . . dangers. Such sentiment as appears to exist n favor of the consolidation of the railroads into a very few reat systems is, I believe, largely artificial. There is very little entiment of the kind among either shippers or railroad offiers. For the most part, I think that it emanates from financial circles which are likely to reap large profits from the mere process of putting the roads together."

Such a charge, which has a possible extension to the merger trends in other industries as well, cannot be lightly set aside. If there is doubt in the minds of the commissioners as to the desirability of consolidation, the door is surely left wide open for reëxamination. Because in 1920 it seemed a benefit to the country to reorganize the railroads, we should not now be battling to effect that reorganization if it has ceased to benefit anyone but banks and banking houses. With the railroads earning better returns than ever before in their history, with all operating records at their peaks, why consolidate? To whose interest is it, and to whose injury?

Systems of equal strength.—The broad principle which underlies all the consolidation moves is that well-organized, well-balanced enterprises are better public servants than disorganized, unbalanced enterprises. It is thought more desirable that a large, efficient organization like the Pennsylvania Railroad should earn 4 per cent on its investment than that one line from New York to Philadelphia should earn 8 per cent while another line from Philadelphia to Atlantic City operates at a loss. The functions of a railroad are infinitely diverse; it carries pigs and cattle in rattling box cars, bankers and lawyers in smooth-running Pullmans. It hauls vast bulks of iron ore at a lumbering pace in open gondolas; it rushes tons of perishable fruit in ice-cooled refrigerator cars. Last summer over the Southern Pacific sped carloads of potted lilies, and last summer over the same railroad lumbered the Army's heaviest siege gun, weighing, with its railway mount, 730,000 pounds. The railroad stops at Coon Hollow at 11:45 P.M. to take a solitary traveler to neighboring Millersville, and it puts on a dozen extra trains for a big football game. It stretches a ribbon of track straight to the horizon to connect Texas prairies with the world, and it bunches complex ganglia of yards and sidings to bring tons of food and materials into Boston and St. Louis. The variations are endless. No one line does all these things, and all lines do some of them. There are terminal roads, coal roads, commuters' roads, through freight roads, each type facing entirely dissimilar problems, each type necessary to a complex civilization.

Through consolidation of the weaker lines with the stronger, of terminal roads with coal roads, through merging two roads which wastefully compete in a territory barely able to support one, there is created a system which can efficiently perform unprofitable services and make its prosperous services pay the bills. Insofar as any single consolidation actually will accomplish this, actually will improve the average of the railroads' *service to the public*, the project is on solid ground. Apart from service, there resides no inherent merit in joining a weak road to a strong system. An ill-planned road will continue to be an ill-planned road, whether or not it is attached to a well-planned road. While the Jersey Central, serving a continuous urban and industrial area, earns about 8% on its investment, the Chicago & Alton is in receivership. Linking both to the Baltimore & Ohio will not greatly alter the essential economics of the two lines, although it may level the returns to their stockholders. And anti-consolidationists hold this leveling process an injury to the wise stockholders who chose to invest in the well-planned, prosperous line. Only upon proof that railroad *service* will be bettered, can a consolidation program overcome the difficulties raised by unequal planning, unequal traffic, and unequal management.

This fundamental idea is not new, nor is consolidation a new problem of railroading. Both the Pennsylvania and the New York Central in the East and the Santa Fe and the Union Pacific in the West are the product of consolidations. Into the Pennsylvania went 600 roads, into the New York Central, 400. When these systems were created, in response to the need for an outlet here, a tapping line there, consolidation was easier than it is now. Cornelius Vanderbilt had only to write a check, and he had bought a railroad. The Van Sweringens, attempting to do exactly the same thing, find themselves caught in an intricate and baffling maze of public demands and prohibitions.

Economy.—Most merger applications make much of the economies to be gained by the creation of a larger unit. In such a famous application as that of the Great Northern–Northern Pacific, the argument was used with considerable effect. The two roads estimated an annual saving of about $10,000,000, divided thus:

Rerouting	$1,536,000
Terminals	3,087,000
Fuel	2,282,000
Shops	536,000
Accounting	669,000
Purchasing and stores	1,063,000
Maintenance of way	149,000
Traffic	817,000
TOTAL	$10,139,000

This is not free from the possibility of controversy. It can be argued that a large part of these economies could be gained without consolidation. And it has not yet been shown that the facts will bear out the promise. When the British Amalgamation Act (1921) joined the railroads of England into four systems, Sir Eric Geddes forecast economies of from $100,000,000 to $125,000,000 per annum. These have been realized only fractionally. While the late Senator Cummins in 1926 declared United States consolidation savings might reach the staggering total of $300,000,000 a year, he was figuring, necessarily, without any real knowledge of what new expenses might arise to offset the promised cuts.

This economy argument is new; it was barely mentioned when Congress debated the Transportation Act in 1920. Economies of one kind or another undoubtedly will follow intelligent consolidation. But they are more likely to be economies in future construction than economies in present operation.

Competition.—More vital considerations are those which make up, roughly, the public interest as distinct from the interests of the railroads and their stockholders. The preservation of competition is one, and the maintenance of "existing routes and channels of trade" is another. Here the differences between East and West must play a large part in the problem. It is highly desirable, for example, that a large traffic center, such as Kansas City, should not be served by one railroad; on the other hand it would be ridiculous to have several systems tapping the same thinly settled districts of the West. Here again the application of the Northerns furnished a case in point. Each road is the other's chief competitor, and at first glance competition might not seem to be notably preserved by their union. But they were able to show that of the six major western roads, three paralleled each other across the narrow 500-mile belt of the Northwest, battling for the same Oregon shingles, Washington apples and salmon, Minnesota wheat, and Montana copper. Thus in comparison with the central and southern lines, they made a poor showing:

Railroad	*1928 Total Operating Revenue*	*1928 Net Operating Income*	*Percentage of Return*
Southern Pacific	$300,000,000	$54,900,000	5.627
Santa Fe	247,000,000	55,300,000	6.506
Union Pacific	215,000,000	43,800,000	6.435
*	*	*	*
Milwaukee	170,000,000	29,100,000	4.333
Great Northern	126,000,000	31,200,000	6.037
Northern Pacific	101,000,000	25,000,000	5.056

Valuations taken from consolidation application of the Northerns.

By consolidation, the Northerns argued that they would do no more than give the Northwest a system equal in strength to those farther south. While the Milwaukee might charge that the merger would cut into the traffic of its western extension, the Northerns could reply that the Milwaukee should never have built such an extension and that consolidation would in fact create more competition (between regions), instead of less. The "preservation of competition" is a phrase hard to interpret, varied in its applications. In each case it must be weighed anew as an argument for or against consolidation.

Existing Routes and Channels of Trade.—If the Burlington should be divorced from the Great Northern and the Northern Pacific, existing channels of trade would be partially disrupted. In 1926, the Burlington interchanged 101,612 carloads with the Great Northern and 85,972 carloads with the Northern Pacific. Shippers have become accustomed to reach their markets in this way, and the railroads depend upon this interchange. In most cases, consolidation strengthens such trade routes and is welcomed by shippers.

Local Interests and Minority Stockholders.—From October, 1927, to March, 1928, the I. C. C. held hearings on the Northern merger. To the hearings came an impressive pair of railroad lawyers to put forward the case for the applicants: Frank Lyon Polk for the Northern Pacific and Walker D. Hines for the Great Northern. And to the hearings came also the eminent Fred H. Wood, retained by the Milwaukee to lead the opposition. Mr. Wood's client was known as an "intervener" in the case. Besides the Milwaukee many another intervener came to the hearings. St. Paul, Fargo, Duluth, and Tacoma protested against it, as did the Railroad Commissions Wisconsin and Iowa. Most of the objections were that competition would be injured or local pay rolls diminished. Since only the Northwest was involved in the merger, the intervening interests were more localized than in many cases.

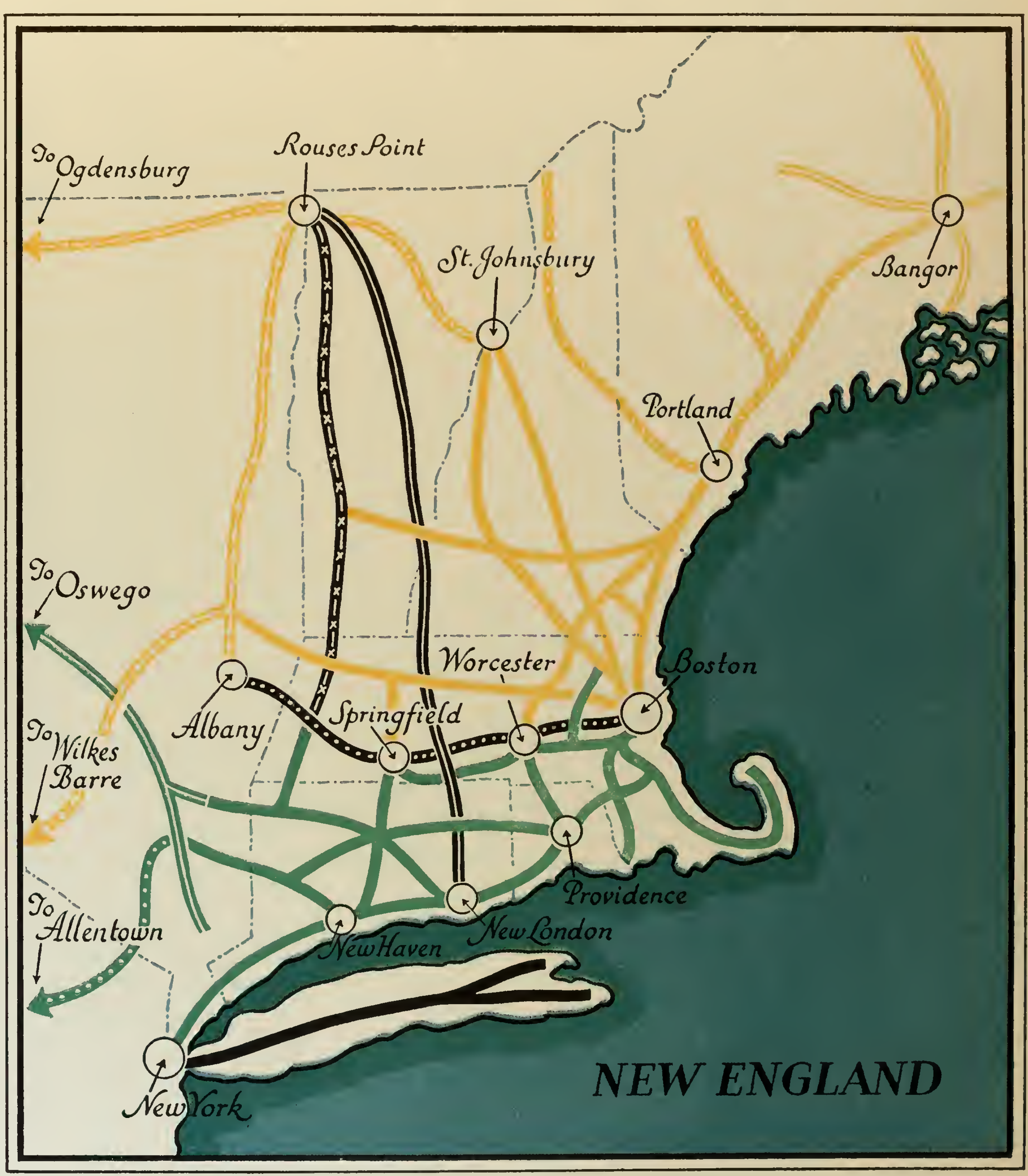
Local interveners may be for or against the merger, but there is never any doubt about the attitude of minority stockholders who intervene. They are the bane of every consolidator, the cross he must bear. In the Northern merger the only minority stockholder to intervene was Clara Hill Lindley, the daughter of J. J. Hill himself. Perhaps largely on sentimental grounds, she objected to the incorporation in Delaware of an entirely new company to take over the two Northerns. Except for this comparatively minor objection, the stockholders of both railroads seemed content with the arrangements. That the companies were of about the same financial strength

[*Continued on page 112*]

THE RAILROADS OF THE UNITED STATES

A portfolio of maps, outlining the principal carriers and showing their grouping under the Final Plan of the Interstate Commerce Commission.

THE Interstate Commerce Commission sees the country as composed not of forty-eight states but of four railroad empires: the West, the South, New England, and Trunk Line Territory. These are not water-tight compartments, as is demonstrated by roads like the Wabash, which penetrates beyond Trunk Line Territory into the West, and the Illinois Central, with tracks in both trunk line and southern territory. But the great part of every railroad's business is done in one and only one of these four great regions. Subordinate to these railroad empires are certain petty kingdoms: the West includes both the northwestern ("Granger") and southwestern territories, and Trunk Line Territory has its subordinate Pocahontas Region centering around Chesapeake Bay. The railroads in these lesser kingdoms are destined to go to one or another of the roads in the greater empires rather than to form their own local systems. Thus the four main empires can be taken as the geographical bases of consolidation. Each of them has its industries and trade centers, its individual traffic needs, and its railroads to take care of these needs. These cities, industries, and railroads already existing must determine the nature of future railroad combinations. A charting in words, lines, and colors of the four rail empires shows the material out of which their consolidations will be built.



(These maps have been slightly distorted for purposes of clarity.)

Boston & Maine 🟧
- *Boston & Maine*
- *Delaware & Hudson*
- *Bangor & Aroostook*
- *Maine Central*
- *St. Johnsbury & Lake Champlain*
- *Rutland (in part)*

New Haven 🟩
- *New York, New Haven & Hartford*
- *New York, Ontario & Western*
- *Lehigh & New Engalnd*

Assigned to Outside Systems: ■
- *Boston & Albany (New York Central)*
- *Rutland (in part) (New York Central)*
- *Central Vermont (Canadian National)*
- *Long Island (Pennsylvania)*

I.—NEW ENGLAND: A TERMINAL EMPIRE

Way down East, shut away behind Lake Champlain and the Hudson River from the rest of the country, are the six New England states. In density of population, two of them are above the average, and three, Rhode Island, Massachusetts, and Connecticut, rank first, second, and fourth respectively. This tiny, thickly settled corner of the United States has not the typical American alternation of broad cornlands and great cities. The farms are small, hilly, strewn with rocks, and Boston is the only New England city among the twenty-five largest American cities. The population is scattered thickly over the region in large towns and small cities: Worcester, Bridgeport, Fall River, Providence, New Haven, Hartford—the list is endless. Hardly a New England town that has not its own industry. Massachusetts has cotton mills in Fall River and Lowell, tool shops in Worcester, shoe factories in Lynn, paper mills in Holyoke, and fisheries in Gloucester. Connecticut has hat factories in Danbury, bicycle shops in Hartford, copper and brass foundries all through the Naugatuck Valley. And there are the woolen mills of Providence, R. I., the cotton mills of Manchester, N. H., the granite quarries of Barre, Vt., and the fisheries of Portland, Maine.

From a railroading viewpoint, industrial New England is one great city spreading over Connecticut, Massachusetts, Rhode Island, and the southern part of New Hampshire. The two dominant New England railroads, the Boston & Maine and the New York, New Haven & Hartford, are primarily terminal roads. Their function is on the one hand to receive freight from the trunk lines and to distribute it throughout the thickly populated territory they serve; on the other hand, to carry the manufactured goods of New England to the seaboard or to the trunk lines. The Boston & Maine spreads out from Boston in a general northwesterly direction through northern Massachusetts and southern New Hampshire. The New Haven spreads out from Boston southwesterly through southern Massachusetts, Rhode Island, and Connecticut. They are complementary rather than competitive since they operate in distinct terminal zones. The Boston & Albany lies in between the two. The other New England roads, the Maine Central, Bangor & Aroostook, Rutland, Central Vermont, etc., are rural roads serving less populous territory. They are important largely as connections between southern New England and Canada. There are two possible groupings of the New England roads: one is to assign them to various trunk lines, thus extending trunk line competition into New England; and the other is to form one or more New England consolidations. Even if all the roads were grouped in one system, it would have only 7,000 miles of track. Since the New England roads have now recovered their prosperity, such a consolidation would be financially sound.

The Commission's Plan agrees with local public opinion that regional consolidations would best serve New England. Two roads of importance, the Boston & Albany and the Central Vermont, have long been controlled by the New York Central and the Canadian National respectively. The Commission leaves these roads to their present holders, and groups all the rest around either the Boston & Maine or the New Haven. To both systems are added extensions into the Pennsylvania coal fields. There is only one merger project now before the I. C. C. that affects New England. This is the Loree Belt Line Project, which groups most of the New England roads with various roads in Trunk Line Territory to form a large Atlantic seaboard terminal system. The Final Plan not only disregards this completely, but also assigns Mr. Loree's own Delaware & Hudson to the Boston & Maine.

II.—THE TRUNK LINES

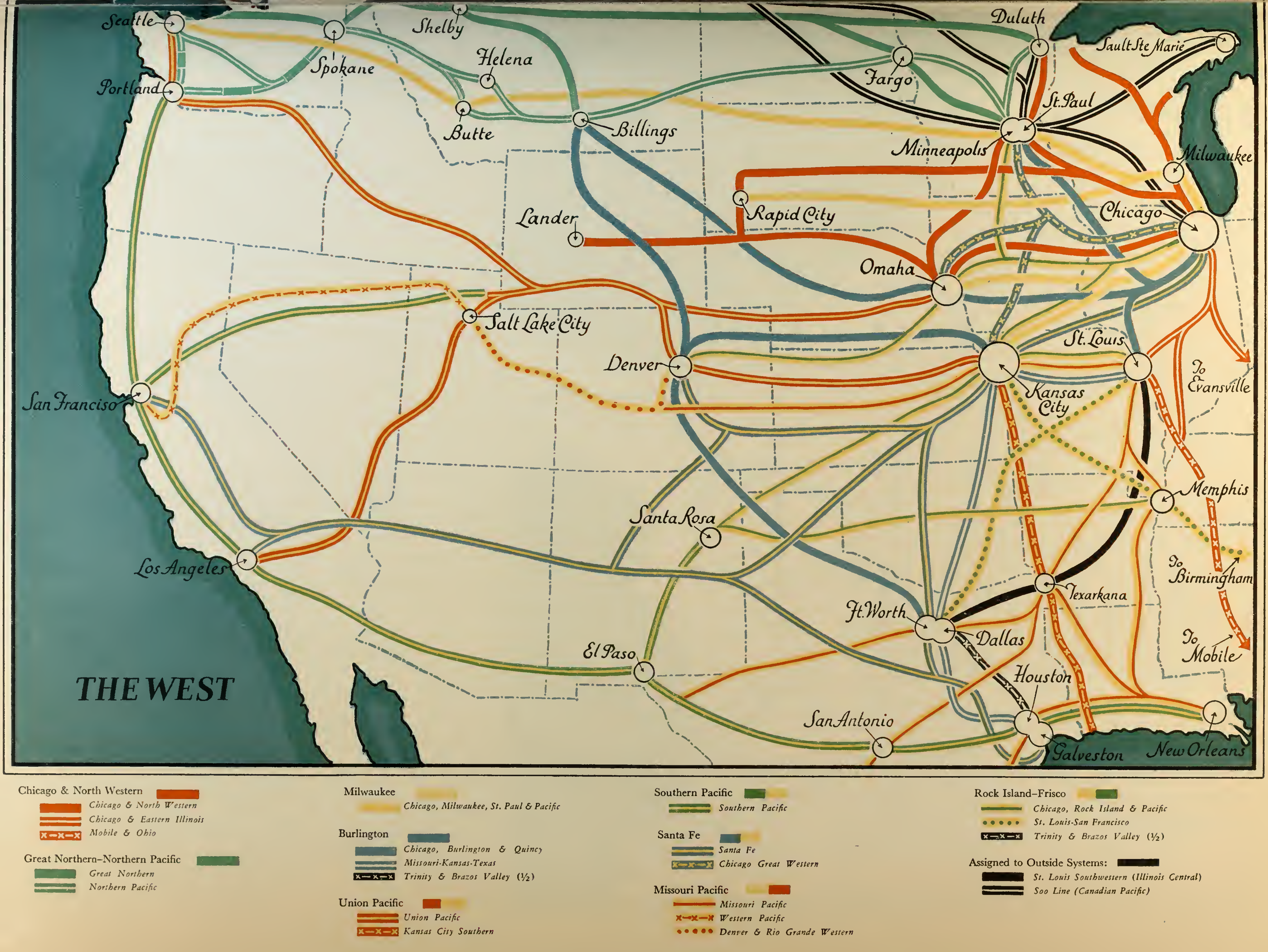
A tremendous urban and industrial development makes Trunk Line Territory the crucial field in any national consolidation plan. Of the twenty-five largest American cities, fifteen (among them the six largest) are in Trunk Line Territory. Along the Atlantic seaboard are strung Washington, Baltimore, Philadelphia, and New York. Farther inland are Buffalo and Pittsburgh, gateways to an industrial region that includes Cleveland, Columbus, Cincinnati, Indianapolis, Toledo, and Detroit. For its western gateways the territory has Chicago and St. Louis. In this empire the machine is king. From New York and Pennsylvania, the two leading manufacturing states, through Ohio, Indiana, southern Michigan, and Illinois, it is an area of industry. Here, in the mountains of Pennsylvania and West Virginia, is found the coal which feeds the machine. And here too is produced, by United States Steel and Bethlehem in Pennsylvania and by the newly formed Republic Steel in the Middle West, most of the basic machine material, steel. The trunk lines not only link up all these cities and industrial areas, but they also exchange the manufactures of the East for the food and raw material of the West. Nowhere in the country are transportation problems more complex than here. Nowhere is railroad competition more intense.

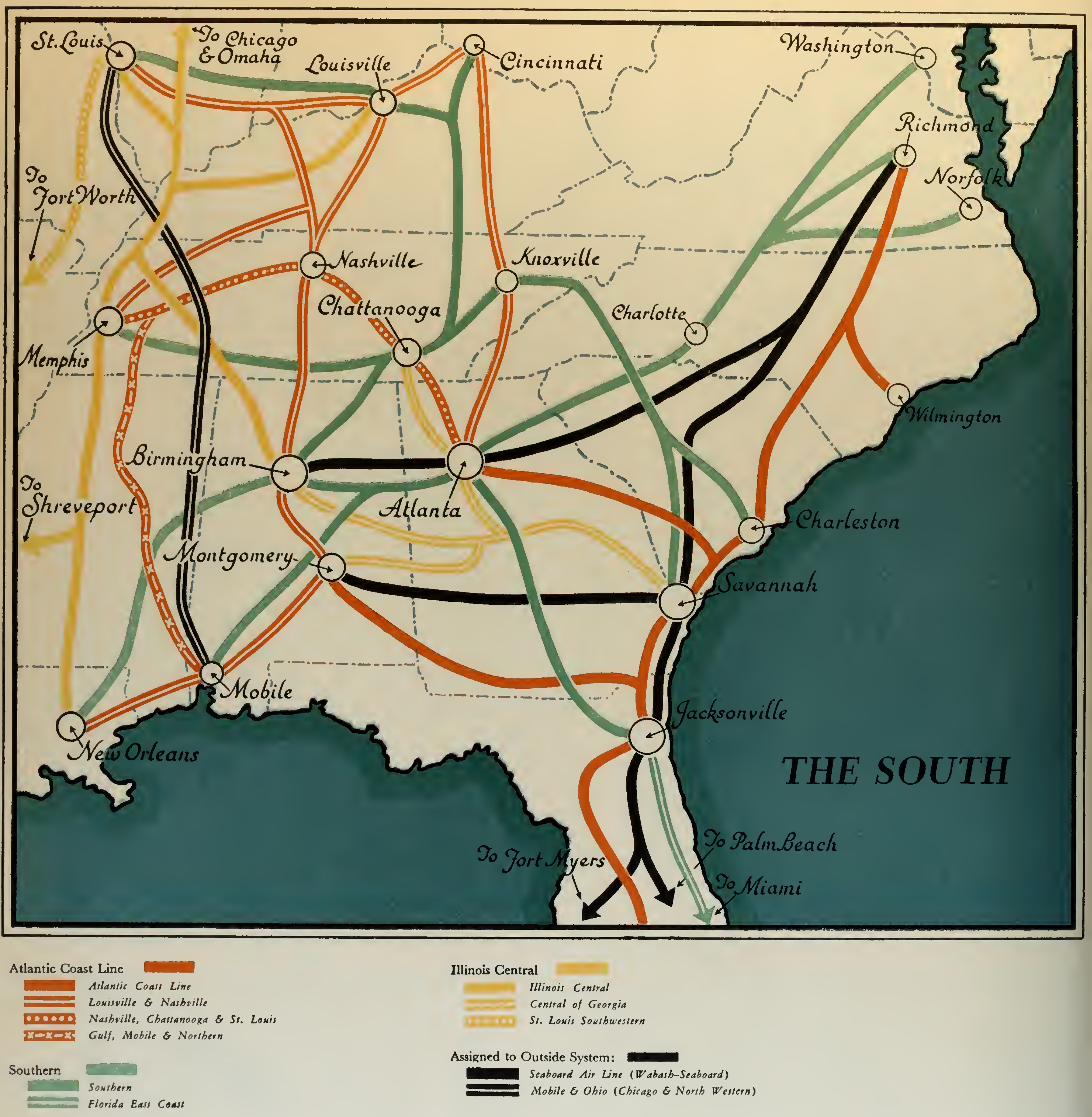
Coal.—One thing that makes competition especially intense is the fact that Trunk Line Territory contains most of the country's coal, a commodity that is important to industry and vital to the railroads themselves. Good coal property on its lines is a major source of strength for many a railroad. As every housewife knows, there are two kinds of coal: hard (anthracite) and soft (bituminous). Practically all anthracite coal in the country comes from an area of 480 square miles in northeastern Pennsylvania. To carry this coal from its tiny producing area to tidewater, whence it can be distributed by water over the length and breadth of the land, there has come into existence a group of highly specialized railroads known as the "hard coal roads." These are preëminently the Lehigh Valley, the Lackawanna, the D. & H. and the Reading–Jersey Central system. Taking the coal from northeastern Pennsylvania, these carry it to tidewater at Buffalo on the Great Lakes, at New York and Philadelphia, or at Montreal on the St. Lawrence. Their vital dependence on coal is revealed by the fact that in 1928 "products of mines," which means almost entirely hard coal, made up 56 per cent of Lackawanna traffic, 54 per cent of Lehigh, 63 per cent of Reading, and 65 per cent of D. & H. However, these roads are important in trunk line mergers, not so much for their coal as for their strategic positions. The Baltimore & Ohio badly needs the Reading to give it an entrance into New York, and any one of the other four trunk lines could use either the Lehigh or the Lackawanna as a valuable line from Buffalo to New York. Another reason why consolidators are looking more to the geography than to the coal traffic of these roads is that anthracite coal is steadily diminishing in importance in comparison with bituminous. In 1908 anthracite production was 76,400,000 long tons, bituminous 352,400,000 long tons; twenty years later anthracite was 68,512,000 long tons, bituminous 439,900,000 long tons.

The soft coal supply of the country, though less localized than the hard, largely depends on the deposits of the Pocahontas Region in the southern part of West Virginia. Three railroads serve this region: the Chesapeake & Ohio, the Norfolk & Western, and the Virginian. They stretch from the coal fields to tidewater at the entrance to Chesapeake Bay. Since they serve a less industrialized and populous area than do the hard coal roads, the traffic of the Pocahontas roads runs even more to coal: 86 per cent of the C. & O. total, 83 per cent of the Norfolk & Western, and 94 per cent of the Virginian. On account of their heavy tonnage and low operating expenses, these roads are extremely prosperous. No part of the Pennsylvania system is more profitable than the Norfolk & Western; and the Virginian, with the remarkably low operating ratio of 54.67, as compared to the 72.62 of even so prosperous a line as the Jersey Central, is coveted by more than one consolidator. Two of the Pocahontas roads approach trunk line extent: the Norfolk & Western, which reaches Columbus and Cincinnati, and even nearer, the C. & O., which reaches Chicago over its subsidiary, C. & O. of Indiana. The C. & O., indeed, is made the base of the Van Sweringen trunk line consolidation. Roughly paralleling each other, the three soft coal roads are active competitors in one of the richest railroad districts of the country. And to control these desirable properties are competing, in turn, the trunk lines.

Tactics.—Competition breeds conflict. For nine years the main theatre of consolidation warfare has been Trunk Line Territory. The struggle has been dominated by the four trunk line powers: the Pennsylvania, the New York Central, the B. & O., and the Van Sweringen roads (C. & O., Erie, Nickel Plate, Pere Marquette). At various times lesser powers, notably the Brothers Taplin, Leonor F. Loree, and the Wabash, have played aggressive parts in the warfare, but only the Wabash has much prospect of success. Of the four prime movers in trunk line consolidation, two play one kind of game, two another. The B. & O. and the Van Sweringens, having an urgent need of certain roads to complete their systems, have long been active and constructive in their consolidation moves. They both have merger proposals now pending before the Commission. On the other hand, the Pennsylvania and the New York Central, whose systems are large, completed, and well-integrated, have been playing a defensive, negative game. They have no proposals before the Commission. The naturally allied B. & O. and the Van Sweringens know the New York Central as their good, if somewhat passive, friend, the Pennsylvania as their most determined enemy. The boldness of such Pennsylvania moves as the wresting of the Pittsburgh & West Virginia from the Van Sweringens and of the Detroit, Toledo & Ironton from the B. & O. have made the Pennsylvania a potent destructive force in consolidation.

The eastern merger situation represents, broadly, the attempt of certain trunk lines to supplement themselves with regional roads. The two great trunk systems, the Pennsylvania and the New York Central, are already securely entrenched. They have their north-and-south extensions tapping the territory on either


THE WEST
Seattle
Spokane
Shelby
Helena
Portland
Butte
Billings
Fargo
Duluth
Sault Ste Marie
St. Paul
Minneapolis
Milwaukee
Chicago
Rapid City
Lander
Omaha
Salt Lake City
Denver
St. Louis
Kansas City
To Evansville
San Francisco
Memphis
Santa Rosa
To Birmingham
Los Angeles
Texarkana
Ft. Worth
Dallas
To Mobile
El Paso
Houston
San Antonio
Galveston
New Orleans
Chicago & North Western
Chicago & North Western
Chicago & Eastern Illinois
Mobile & Ohio
Great Northern–Northern Pacific
Great Northern
Northern Pacific
Milwaukee
Chicago, Milwaukee, St. Paul & Pacific
Burlington
Chicago, Burlington & Quincy
Missouri-Kansas-Texas
Trinity & Brazos Valley (½)
Union Pacific
Union Pacific
Kansas City Southern
Southern Pacific
Southern Pacific
Santa Fe
Santa Fe
Chicago Great Western
Missouri Pacific
Missouri Pacific
Western Pacific
Denver & Rio Grande Western
Rock Island–Frisco
Chicago, Rock Island & Pacific
St. Louis-San Francisco
Trinity & Brazos Valley (½)
Assigned to Outside Systems:
St. Louis Southwestern (Illinois Central)
Soo Line (Canadian Pacific)


THE SOUTH
St. Louis
To Chicago & Omaha
Louisville
Cincinnati
Washington
Richmond
Norfolk
To Fort Worth
Nashville
Knoxville
Chattanooga
Charlotte
Memphis
Wilmington
Birmingham
To Shreveport
Atlanta
Charleston
Montgomery
Savannah
Mobile
Jacksonville
New Orleans
To Palm Beach
To Fort Myers
To Miami
Atlantic Coast Line
Atlantic Coast Line
Louisville & Nashville
Nashville, Chattanooga & St. Louis
Gulf, Mobile & Northern
Southern
Southern
Florida East Coast
Illinois Central
Illinois Central
Central of Georgia
St. Louis Southwestern
Assigned to Outside System:
Seaboard Air Line (Wabash–Seaboard)
Mobile & Ohio (Chicago & North Western)

IV.—THE SOUTH

On one side the South is bordered by the Atlantic Ocean, on one side by the Gulf of Mexico, on one side by the Mississippi River, and on the fourth by the Ohio River. Like the West, it is primarily a producing region: Florida grows oranges; Birmingham digs coal and iron; Mississippi fells timber; and the entire South raises cotton, potatoes, tobacco, corn, and hogs. The railroads haul these products to the nearest watery boundary, and haul back into the interior (from the North and West at least) automobiles, shoes, and other manufactures. Thus most of the traffic centers are points on the edge of the region, as Charleston and Jacksonville on the Atlantic, Mobile and New Orleans on the Gulf, and Memphis on the Mississippi. In the interior are the two great centers of Birmingham and Atlanta, from each of which radiates a fan of railroads. Since most southern produce is either shipped from Gulf ports or exchanged, via such northern gateways as Louisville and Cincinnati, for the manufactures of the northern states, the railroads take a general north-and-south direction.

None of the other rail empires has as little to gain or lose by consolidation as the South. Of the 40,000 miles of railroads in the South, 36,000 are already controlled by four systems: the Southern, the Seaboard Air Line, the Atlantic Coast–Louisville & Nashville, and the Illinois Central. And, with one exception, these systems are fairly equal in size and earning power. The one and only major problem in southern consolidation is the disposition of the Seaboard. The Ripley Plan grouped it with the Norfolk & Western into an independent system; the 1922 I. C. C. Tentative Plan assigned it to the Illinois Central (which vigorously protested); and now the Final Plan awards it to the equally reluctant Wabash. Except for this allocation of the Seaboard, the Final Plan leaves the railway map of the South essentially unchanged.

Diamond v. Emerald, Ruby & Sapphire

A comparison of the seven cardinal virtues of four precious stones, showing why the colored gems are more exciting to pursue and to possess.

A FAMILIAR figure to those who frequented the gilded corridors of the Waldorf-Astoria Hotel in New York toward the close of the last century was that of "Diamond Jim" Brady, whose fortune in speculation and railroad supplies had flourished like a fungus, and who expressed his wealth by illuminating his fatness with diamonds. Mr. Brady wore diamonds in his teeth and on his braces. His more obvious use of them included diamond shoe buttons and a pair of jeweled spectacles for his dog. Naturally, the gems with which he embellished his underwear were not visible to the eye, but he took good care to wear many others, shaped like railroad cars, locomotives, and air brakes, so that on his more demonstrative days, the onlooker was attracted, not so much by the passage of a famous and provident New Yorker, as by a pyrotechnical hulk the like of which was not to be seen in the midlands or, indeed, anywhere except in the vicinity of Mr. Brady's extraordinary person.

He was an impressive figure; any man who bears with him such patent symbols of worldly success is bound to excite the respect and awe of his fellows who are less fortunate. He was something to be remembered in New York, like the extravaganzas of the Hippodrome, the crush of barouches on Fifth Avenue, and the hordes of sightly ladies who promenaded of a Sunday afternoon on the same boulevard. There must, however, have been reflective spectators of this American phenomenon who regarded it as more than a little akin to the tinselly blare of the Hippodrome shows. What, this philosophical few must have asked themselves, is "Diamond Jim" Brady's purpose? What effect or personal satisfaction does he hope to achieve by his encrustation of jewels?

A variety of answers would immediately have suggested themselves. Perhaps, simply enough, Mr. Brady was as fond of the flash of diamonds as he was of food. He it was who once remarked of the thick creamy sauce on a filet of sole Marguery: "That's so good that I could eat it on a Turkish towel." Perhaps the fact that Mr. Brady wore a respectable fortune in gems enhanced his feeling of solidarity, of prosperity. Perhaps he thus established himself as an individual, advertised himself as the arch-salesman that he was. But whether his garnishing was for self-satisfaction or from a wish to impress others, one fact is quite apparent—the diamond was the only jewel which would have fully accomplished his aim.

For it seems manifest that the quality Mr. Brady most ardently sought was the quality of shine. Whether for his own benefit, or that of others, he wanted to shine. His was an assertive nature and he naturally chose the diamond, the most assertive of gems. It could not have troubled him to reflect that diamonds were the most ordinary and widely possessed of gems; the fact remained that their sparkle was matchless, their costliness was universally recognized, and there were very few people who could afford to wear them in bulk.

Mr. Brady's position, if such it was, was impregnable. The diamond *is* the gem which can be perceived at the greatest distance. The diamond *is* a supremely expensive commodity. It makes but slight difference that practically every womanly woman in the land exhibits a diamond on her ring finger, that more diamonds are sold per annum than all other precious stones put together. Diamonds in the mass, a sunburst, a tiara, are still considered by the general public a spectacle of grandeur as well as a token of high solvency, and the matron who dons them still considers herself as much a vehicle of wonder as did the Mogul emperor when he held in his hands the immense Kohinoor diamond, newly dredged from the shafts of Golconda in the Indian province of Hyderabad.

Friendly warning to dowagers

Yet it occurs to many people of discernment that the diamond is a treacherous stone. Skillfully cut, in its finest white and blue-white manifestations, it is a perfect and dazzling mineral which offers an utterly cold, inhuman radiance. To some degree it always chills the warm, human aspect of its wearer, but if the wearer is already a chilly person the diamond produces an astonishing refrigeration. For this reason, only the most vital, full-blooded persons may wear many of these gems without substantial loss of temperature. What further seems clear is the fact that the diamond's perfection of form and luster (58 mathematically computed facets compose the classic "brilliant" cut which gives the maximum sparkle) makes it an impossible ornament for people with poor profiles or dumpy bodies. An exquisite diamond may almost be heard to mock at a pudgy nose, a scrawny neck, or similar physical imperfections. Thus it would seem that diamonds had best be forbidden ornaments except for those whose features and figures are of fine design and whose blood runs briskly. That is why a puffy dowager, issuing forth with her tiara boomdeay, is so apt to appear both pitiful and absurd, and why the strange case of Mr. Brady is remembered as a travesty of taste.

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The fastidious few will bear in mind their human imperfections and will take care not to emphasize them by injudicious use of such an exacting gem.

They will, on the other hand, be increasingly delighted with the colored stones (rubies, sapphires, emeralds) which, shimmering and smouldering, possess more subtle iridescences than the diamond and are not only beautiful but sympathetically and warmly suited to the human texture. Furthermore, while it would never occur to a tasteful person to wear jewels either for showiness or expense, it is quite in accord with the canons of good taste to delight in something valuable—not as regards cost, but as something rare, esoteric, difficult of attainment. And from the standpoint of value, in this sense, the lordly diamond must yield to the colored gems; its combination of intrinsic and extrinsic values is less appealing to the gem fancier than the combinations of values which may be had in the ruby or the sapphire or the emerald.

In order fully to appreciate this statement, which may be surprising to many, it is necessary to consider in detail the qualities which make a stone, in the given sense, valuable, and to compare the stones in regard to these qualities. Naturally, they are the same qualities which determine prices, for that which is most prized has always been most costly. It would seem, therefore, that diamonds, which have just been called less valuable than the colored gems, should be correspondingly cheaper. Everyone knows that they are not. The explanation of this apparent paradox, which will be given as we progress, is of the utmost importance to one who would be wise in the selection of gems.

The value-determining qualities are seven: BEAUTY, COLOR, SIZE, PURITY, DURABILITY, FASHION, RARITY. Obviously the value of any individual stone depends upon a complex interaction of these qualities, and a monstrous freak opal, perfectly clear, spherical, and three feet in diameter, might conceivably be more valuable, though the opal is commonly classed as a "semiprecious" stone, than a large but conventional diamond. But because they ordinarily exhibit these seven qualities, individually and collectively, to a finer degree, four stones —diamond, sapphire, ruby, emerald—usually emerge as more valuable than the other minerals.

These form the quartet customarily called "precious" stones. The term is valid only financially (and even then is dubious, due to the fluctuations of fashion), for a study of chemical constituency and the qualities mentioned above results in complex considerations which permit no criterion by which certain stones may be called "precious" and others "semiprecious." As a matter of fact, "semiprecious" alexandrites are rarer than any of the "precious" quartet; zircon is more brilliant than any gem except the diamond; amethyst and garnet are, at various times, and quite apart from their relative cheapness, more fashionable than perhaps one or several of the "precious" four. Certain "semiprecious" stones, such as the best specimens of jade and alexandrite, may, indeed, bring prices which average quite as high as "precious" averages, although the record prices for diamonds, rubies, emeralds, and sapphires have never been topped by other stones. The late Charles Tiffany, founder of the firm which bears his name, always insisted that all ornamental minerals were "precious" stones, and last year American jewelers asked that the words "other genuine" be substituted for "semiprecious" in the Tariff Bill.

The emerald

A more detailed scrutiny of the "precious" quartet may well begin with the emerald, which is pronounced by Dr. George Frederick Kunz, veteran expert of Tiffany's, to be, when large and fine, the costliest gem in the world today. Emeralds are plentiful but relatively fragile stones—the most fragile of those under consideration. In addition they never seem to be free of infinitesimal carbon spots, and the expert who claims to have seen a flawless emerald is likened, by his fellows, to a talkative fisherman. Hence emerald collecting offers the thrill of search for stones as clear as possible.

Some enigmatical creed of taste decrees that emeralds of a lustrous dark green shall bring the high prices and those of a liquid light green shall be comparatively cheap. Perhaps this is a ramification of that *fin de-siècle* reverence for things which are dark and sombre and corresponding distrust of the lighter hues in everything from painting and furniture to systems of moral-

Courtesy of Black Starr & Frost, Gorham, Inc.

ity. An age which lets more sunlight through its walls and admires the pastel tints of Claude Monet should speedily restore financial prestige to the light green emerald. With any observant person, these lovely stones are in no need of esthetic prestige. When Queen Victoria of Spain recently visited the International Exposition at Seville, she paused a long while before the $10,000,000 display of emeralds in the Colombia Building, thus motivating among Spaniards the most lively vogue that the emerald enjoys today.

Russia produces inferior emeralds on the Asiatic side of the Urals near Ekaterinburg, and some Austrian peasants of Bramberg once communistically operated an emerald mine which is now extinct; but high in the Andes, near Bogotá, Colombia, are the Muzo and Coscuez mines, which yield the most distinguished examples of this most distinguished member of the beryl family. A few years ago the Colombian Government characteristically began ignoring a contract with Rosenthal Frères of Paris under which they worked these mines. The Rosenthals now make a useless legal pother while Colombia doles out the gems as it wills and, of course, boosts the prices. This method of control should be remembered in connection with a case which will be discussed later where its effects are so considerable as to be appalling.

Ruby and sapphire are both corundum

Ruby and sapphire are names used to denote certain colors of the same chemical substance—corundum (alumina or aluminum oxide, Al_2O_3). A ruby is red corundum; a sapphire, blue. Other corundums are yellow (oriental topaz), green (oriental emerald), purple (oriental amethyst), and colorless (white sapphire). Burma, Siam, and Ceylon contain the great corundum beds. In Ceylon the evasive ruby is found many feet beneath the surface, under the roots of rubber plants. But the best rubies are Burmese.

The ruby is the rarest of the "precious" quartet—so rare that the diamond is comparatively ordinary. The fancier is also attracted by the fact that it may be discovered flawless and unblemished, and is of high durability. As in the case of the emerald, a color fetish animates fashionable ruby purchasers. The pigeon's blood stone—like a congealed drop of port wine—brings the highest prices, followed by a still darker shade termed ox blood. The lighter orange-red ruby (note the parallelism with the emerald) does not persuade many buyers. Quite apart from the fact that it is in particular favor with smart Americans at the present time, the ruby is a gem which, by virtue of its warm, sumptuous beauty and its rarity, delights the connoisseur as much, if not more, than any other jewel.

The ruby gives new and beautiful significance to the color red; the sapphire likewise to blue. But the sapphire has not the appeal of rarity possessed by the ruby, for though both are mined in the same regions, corundum is blue far oftener than it is red. Again the dark shades are generally preferred—the ink or cornflower blue sapphires commanding such prices as would never be asked for the delicate, light stones, however attractive these may be. But, on the other hand, because they divulged gems which were too dark (serge blue), the sapphire deposits of Australia, from which much had been expected, proved disappointing to prospectors.

[*Continued on page 130*]

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The Unseen Half of South Bend

Its Industrial Army, its Generals Bendix and Erskine. A $300,000,000 song of the shirt and of motors, brakes, fishhooks, plows, radios, sewing machines, varnish, and croquet balls.

THERE were born in the city of South Bend, Indiana, last year, some 2,083 babies. If they are by-products of love, so also are they by-products of industry. We shall seek to discover both how much and what kind of industrial productivity is required, these days, for the human reproductivity of South Bend.

To understand the life which calls forth the babies in South Bend is to understand why all the babies in all the United States are born. For South Bend is the perfect microcosm, the living example, the photographable average. As you rattle by on the *Century* two hours out from Chicago, you may, hereafter, peer through grime-flaked windows and exclaim with a connoisseur's delight: "An authentic type."

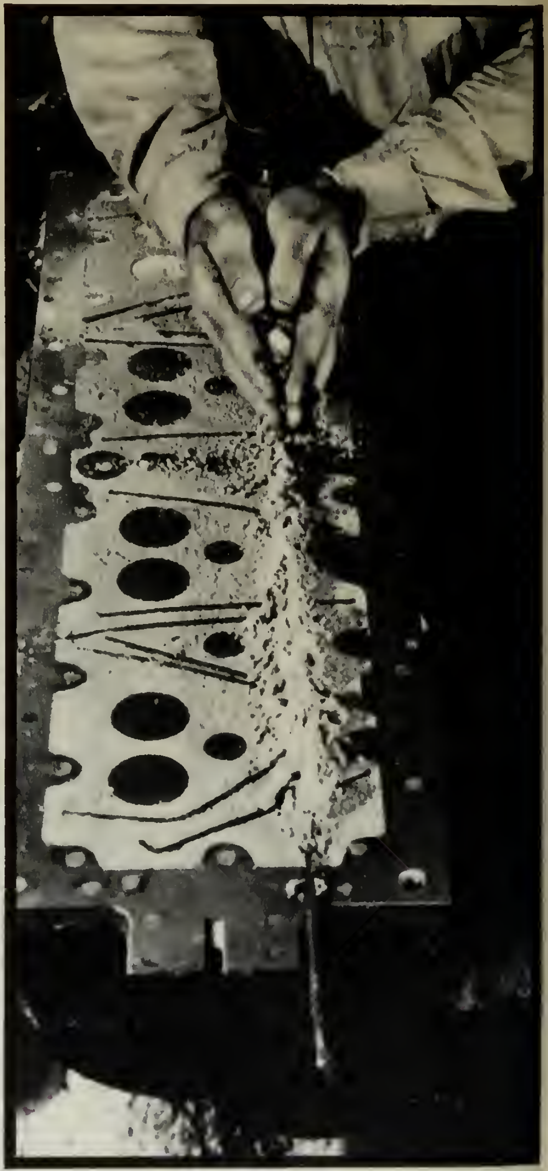
South Bend is typical because it is *not* infinitely awful. It is not simply a pile of industry raspingly flung together, but rather an old town with many trees and local legends of pioneers who settled there on the path of a romantically ancient Indian portage which joined two rivers. Nor are all its industries new. Many are its carpenter shops, both big and little, full of woody wood and shavings, suggestive rather of Nazareth than Dearborn. Rotarians, Kiwanians, and Elks feed religiously and daily together in great and complacent numbers, but you will also see the vast Victorian mansions of stern men long dead who made fortunes single-handed and who made nobody buddy but God. But still South Bend is typical, because so much of South Bend is so new. Its greatest industry is automobiles, which is also the greatest industry in the United States and the most typical of United States genius for mass, volume, speed, change, profits, and *da capo*. Old sanctities remain—but, to them, the several tycoons of the city are, for the most part, indifferent.

THIS BUCKET OF MOLTEN, RED-GOLD METAL WILL BE LADLED INTO MANY LITTLE MOLDS OF SAND

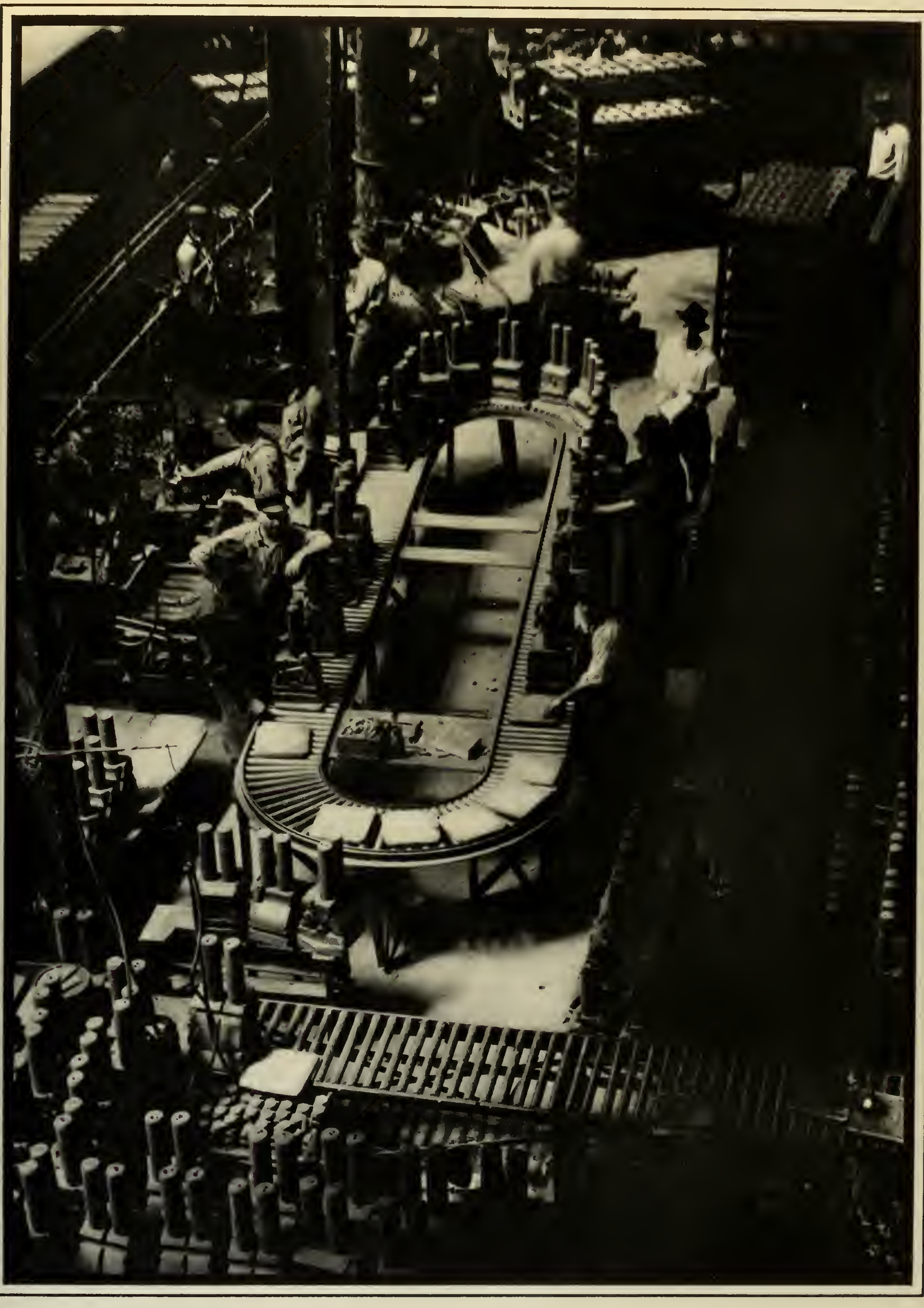
Carefully, therefore, and with the feeling that all America is before us, let us look into this city and trace out its pattern.

Some people will tell you that the First Presbyterian Church was built by a Studebaker. This, however, is not the case. Studebakers gave a third, Olivers a third, and the congregation the balance. That was typical of what happened in South Bend during the half-century between the Civil War and the Automobile. Studebakers got most of the credit; Olivers jealously matched them in fact; both together, but neither separately, were bigger than the rest of the city. More recently, more than a decade ago, both Studebakers and Olivers simultaneously offered to donate a Y. M. C. A. For some reason, the Studebaker offer was accepted. Today, most of the dozens of Studebakers have departed from South Bend; the less prolific Olivers remain but refuse to support a Studebaker Y. M. C. A., with the result that the burden resolves upon the Elks and other anonymous characters. The Oliver namesakes, a hotel and a theatre, are self-supporting. They were founded and run for a time by James, the founder of the whole Oliver business, but have long since passed out of the family's hands.

It was only last year that Olivers retired from public office. This they did by selling out the Oliver Chilled Plow Works to a general combine now called Oliver Farm Equipment Company. Deeply, if not tragically, significant is this for the year 1929. Grandly, egotistically, testily, Founder James Oliver had repeatedly stated that it was the "unalterable policy of the Olivers" never to merge. "No, sir," he pontificated on a memorable occasion in the early days of trusts, "no, sir, your talk of more money and less responsibility means nothing to me. I want my children always to feel the stress and strain of work, and never to forget the burdens of life, in order that they may respect the burdens of others. To be free to come and go is death—morally and mentally, if not financially. Not only do the Olivers run this business to make good plows but they run it for the economic and educational good of themselves . . . If it ever comes to a show-down, I'll take less money and more work rather than greater ease and more money. That is the policy of the Olivers . . ." The dynastic plural referred primarily to his son, Joseph, an abler man than the pioneer father, and quite different, having the tastes of a gentleman and a scholar. But the son, still keen enough to be considered an outstanding citizen, now nearing his eighties and without businessly brilliant progeny, yielded to the titanic forces of 1929 and permitted his company to merge. He sold out his holdings



EVERY AUTOMOBILE IS FIRST OF ALL MADE BY HAND—IN SAND. HERE THE "CORE" FOR SOMEBODY'S CRANKSHAFT



A TINY CORNER OF THE STUDEBAKER CORPORATION'S VAST FOUNDRY WHERE MEN ARE INSPECTING CYLINDER BORE CORES

Courtesy South Bend Bait Co.

for so much money (principally cash) that he is now called the richest man in Indiana. Thus, last year, were definitely closed and audited the books of South Bend's first great era, the ledger of the new era having long since been opened.

PRE-AUTOMOTIVE

It was the Studebakers, not the Olivers, who opened the books of the first South Bend era a few decades after the Indians had been driven away; but, principally, it was John and Clement Studebaker. It happened that John, known always as "J. M.," a younger son of a normally huge family, followed the sun in '49 across the maddening deserts and sullen rivers. One day a covered wagon caught up with him, in California, with a plea from two of his South Bend brothers, Henry and Clement, to return and help them make better wagons at the other end of the gold parade. Back he went and better wagons he made because he knew from observation exactly what was needed. With his $8,000 he bought out his brother, Henry, whose health was poor, and the business started to advance. By 1870, the Gold Rush was ancient history, but Studebaker was known to every farmer in the country as the biggest maker of medium-priced wagons. Thus the Studebaker fortunes grew, huge for those days, although small by modern standards. About 1890, they were doing $2,000,000 worth of business a year; today the Studebaker Corporation does a gross business of about $170,000,000.

It was in 1858 that J. M. got back from California. A year later the afore-mentioned James Oliver came over one day from neighboring Mishawaka. While waiting for a train he met a man who wanted to sell his one-fourth interest in a foundry at just inventory value. In a few hours the quarter of a foundry was appraised at $88.96, and luckily, James Oliver had $100 in his pocket. This tough, shrewd, but somewhat ornery Oliver had been brought as a baby from his parental Scotch hovel. To date, his only distinction had been to ride on the first sixteen miles of the New York Central (Albany–Schenectady) and to marry the daughter of the man in Mishawaka who had a two-story house with a fence around it. Clearly, however, he had in him some of that iron which matched so well the barbarism of the times. He was an inventor more by will power than by genius. But even if pure science ignores his name, it cannot be denied that he *did*, after years of fumbling about in his foundry, devise a method of making *harder* than any man before him the iron cutting-edge plows. This, of course, was an epochal boon to the farmer, who for centuries had been breaking both back and spirit over plows that got stuck in the mud and strangled the horses to death. And Son Joseph today can look to his business of 1890, which did a gross of $1,132,000, then reflect that the new combine will run close to $35,000,000 this year.

Thus, then, was South Bend put on the map. And during the 19th century Studebakers and Olivers made nearly all its history. Under their shadow many a smaller industry grew up, and at least one great affair, the cabinet works of the gigantic Singer (sewing machine) Manufacturing Company, came to the city. It was a natural step even so long ago as 1868. South Bend's Saint Joseph River would furnish water power. And the uncounted acres of virgin forest—rich in hardwoods like walnut, oak, and maple—would be good timberland for a company whose main object in coming to the Middle West was to

The South Bend Bait Company, a nice million-dollar business, gets bamboo from China, steel hooks from Norway, chicken feathers from any chicken and supplies one tenth of the essential equipment for America's amateur fishermen. Here completed rods, each delicately balanced, are shown in the drying room.

have a place to make cabinets to house sewing machines.

South Bend townsfolk at the turn of the century were interested in the Singer plant because to them it typified industry of the era. Today more cabinets are made than ever before—some 700 per hour, nicely veneered cabinets transformed from the 54,000,000 board feet of lumber stacked and conditioned in the yards. A great number go to foreign parts, even into the hidden corners of Asia. In America, Singer is more significant in the factory than in the home, making, as it does, machines for sewing everything from shoes to automobiles in the mass.

South Bend industries employ mostly man power. Back in 1885 the Wilson Brothers of Chicago—four of them—decided to move their shirt factory to South Bend. Their decision rested on one and only one fact: men have women. What were the womenfolk, the daughters, the sisters of South Bend workers doing with themselves? A lot of them were probably doing nothing, reasoned the Brothers Wilson, and a lot of them would like to be doing something; wealth was not a household word in South Bend then, any more than it is today. So to South Bend went the Wilson factory and to the factory flocked ambitious young women, where they found they could make more than mere pin money. Skilled labor? The Wilson company trains its own, cares not at all that most people seem to think that needlework industries must go to Troy, N. Y. in order to prosper. No longer, of course, does the company, now owned by sons and grandsons of the founders, make only shirts, although of those they do make 6,480 a day; underwear, neckties, hosiery are potent parts of Wilson Brothers today. It is their frank boast that theirs is the only concern which manufactures a complete line of men's haberdashery, and sells to every city and hamlet in the United States. They have but one other boast: that only once, and then just for three weeks (in 1920) has their factory been closed because of bad times.

Thus, then, are kept pleased the young ladies of South Bend who want to work; it is the only typical feminine industry in the town. And most typical of the smaller industries that have little use for fair hands is the O'Brien Varnish Company. Perhaps it is that women do not like the smell of paint and varnish or do not enjoy using harsh sandlike soaps two and three times a day to get smudges of color off their hands and faces and clothes. For in the O'Brien plant everything is varnish; you can smell it in the offices even if you have a cold; you can see it on the floors and walls; great ceiling-high tanks are full of it; huge copper kettles are constantly cooking it—fire-hot kettles in ice-cold rooms. Most of the O'Brien varnish cans go out with a statement on them: "A varnish that dries in two hours." Other varnishes, as all good painters know, take longer to dry. How the O'Brien varnish is made so that it will dry quickly only a few in the plant know and they won't say. That partly explains why Mr. George O'Brien has one of the best of the small paint companies, and sells around $2,000,000 worth of varnishes, paints, enamels, and stains yearly. (Sherwin-Williams sells $75,000,000 worth.)

Perhaps not at all typical of the heads of smaller industries, but quite typical of the age in which he was at his prime, is old Mr. Frederick H. Badet. He has just passed his eighty-third birthday. He is slightly deaf and diminutive and a little indifferent to the strident claims of a billion dollar era. Yet you will find him most any day behind a creaking roll-top desk in the quiet corner of a little room in a little ivy-covered house which serves as office building for the ivy-covered plant of the South Bend Toy Mfg. Co. He will not bother to tell you, but others will, that in 1874 girls were permitted to stretch their limbs only in extreme privacy or on the croquet court. While it never entered Mr. Badet's head to invade the privacy of the girls of 1874, it did occur to him to take some profit from their only public sport. And croquet balls he forthwith set himself to make—only a few and by hand or with simple tools. Today his concern, no longer actively managed by him, does an annual business of not quite, but nearly $1,000,000; a nice little business. Although it is called a toy company, it is not at all like a toy store. In fact, it really makes no

AN AUTOMOBILE ASSEMBLY LINE. BODIES HAVE JUST BEEN LOWERED INTO POSITION.

HERE THE RED-GOLD METAL COMES RIGHT FROM THE BUCKET AND IS POURED INTO THE MOLDS.

AGRICULTURE BEGINS IN THE FOUNDRY—WHEELS FOR THE FARMER

toys. But it does make chairs and tables, tiny little things for big dolls to sit in. These are made by some 200 men scattered about a sizable carpenter shop. Wood is everywhere. And around nearly every woody corner you find a splash of paint, baby blue and baby pink. Most of the painting is done by dipping the chairs or tables into a big tub of paint. In one corner the hairy arm of an ex-policeman is engaged all day long in giving the sentimental chairs their bath. And in another corner an ex-prizefighter swings a hairy arm extended and dips little tables in blue.

More delicate is the job of painting the multicolored stumps and mallets of croquet sets. A man with a paint brush sits before a whirling holder. Into the holder he puts a naked mallet. As the mallet whirls he touches his brush to it. Zip, zip, zip—he has made at three different places on the mallet three rings of purple. And, later in its career this mallet will get zip, zip, zip, three bands of red. For still today, old Mr. Badet has the satisfaction of seeing the same sets of croquet shipped from his carpenter shop—east, west, north, south. What if he grosses only $1,000,000? He will die in peace, the founder of a business.

And what if the three Cousins Stephenson gross but $750,000 a year? They will tell you that their business is not as profitable as it might have been had the male descendants of Mr. Badet's croquet-playing ladies continued to wear long, itch-inviting woolen underwear. For when the Stephenson Underwear Mills were founded by a grandfather of all three, he made none but woolens and swore that if "heavies" ever went out, they would be back before long. As everyone knows, they never came back. But today, Donald K., George M., and J. A. Stephenson have a pleasant little business that gives them comfortable homes and cheerful dispositions, even though they recently have found it necessary to make many kinds of underwear, and even more recently acquire the Charles Alshuler Manufacturing Co., a Racine shirt company, to expand their business and satisfy their salesmen.

THE AUTOMOTIVE AGE

Enter, now, with the clang of steel, the roar of furnaces, the toots of financiers, and the honks of salesmen, the great Modern or Automotive Age. And, of a sudden, we find more babies born in South Bend than the local journalist can record the names of—babies produced by a total of 110,000 population whose manufactures are worth $300,000,000 a year. What now is South Bend, what now is the perfect microcosm of the golden age of the Industrial Era?

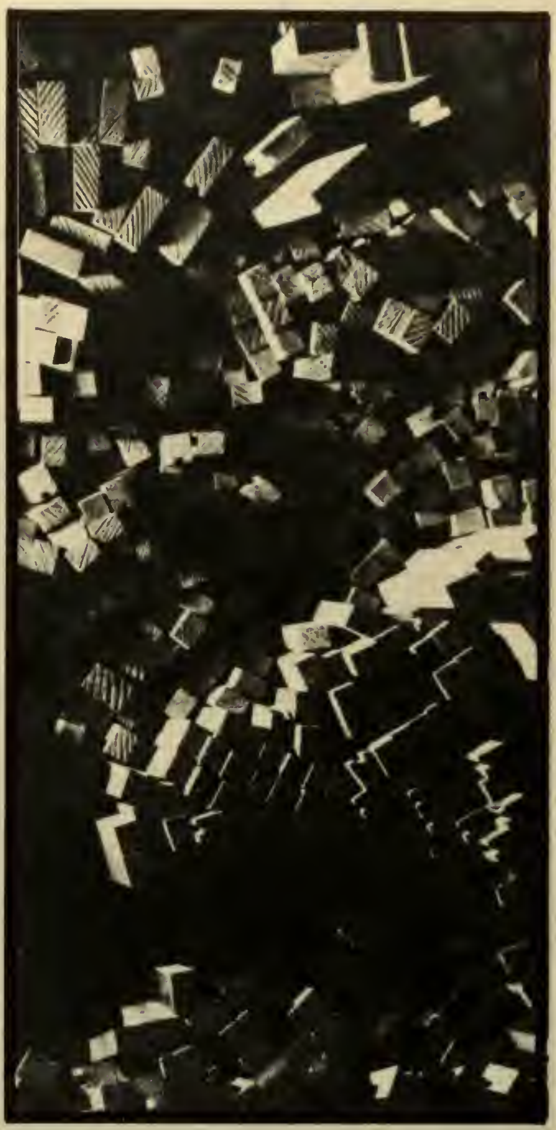
South Bend today is divided into two almost equal halves: those who make things and those who supply the makers with whatever their wages will buy. The latter is the visible half: butchers, bakers, grocers, movie palaces, gasoline filling stations on every other corner, realtors, barbers, candy stores, morticians, trolley cars, "eat" signs, parks, banks. This half is noisy and talkative. Taken as a whole it doesn't make much money, but it is full of watery adolescent hopes, and so it is always reaching for a tip or thinking up a slogan or dreaming of marrying a man with a Packard or reading *Liberty* while it waits.

The other half, the makers, is the army of South Bend. It has officers and sergeants and corporals and privates. The officers are few, relatively much fewer than any military army; their morale is higher. Studebaker employs 15,000 men and commands them with less than 50 men drawing $10,000 per year or more, which would be the equivalent of about one West Pointer for every company in the United States Army. The South Bend privates are well paid. They labor without complaint and without hope. Were it necessary to recruit the army of South Bend from such as you and I, there simply would be no Industrial Age.

This army does its work not on drill grounds, but in barracks—barracks so vast that it is never possible to see from one end to the other. The privates line up, not in mass formation, but at intervals of a few feet or a few yards. Mostly they are in long lines, hundreds of yards long, each with a machine in front of him before which he makes regular motions.

The foundry, the forge

At least half of all industry depends upon the foundry and the forge; i. e., the blacksmith shop. The foundry is about twenty acres under a roof held up by a forest of pillars. Along one side will be a row of brick ovens as big as cottages. Out of them stick spouts like bigger and stiffer elephants' trunks. From the spout a stream of gold-red molten iron flows rapidly into a big bucket. When the bucket is filled, the stream is shut off and the bucket disappears down the lane, being carried by an overhead trolley which takes with it a couple of half-seen men in a kind of side-car contraption. If you run after the bucket you presently see that it stops. Two men will grab it, tip it, emptying its gold-red stream into ladles which are held out to receive it by brawny men, Negroes, perhaps, one after the other. The brawny men walk away with their ladles, which have very long handles. They walk through rows and rows of mud pies. They are not really mud pies, but neatly constructed sand molds with a hole at the top. Into these holes the brawny men empty their ladles, and then something is almost made: a crankshaft or an axle or the base of a plow or the leg of a sewing machine. Whereever it is, the foundry always looks, or rather *feels*, the same. It is heavy, not so much with smoke as with darkness. The darkness smells of decomposing substances: coal oil, molasses water, corn flour, and sea coal. It does not terrify, it numbs; you cannot remember green, you can remember nothing . . .

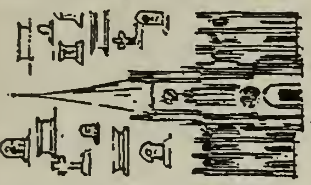


MANY ARE SOUTH BEND'S CARPENTER SHOPS—THE BIGGEST AND WOODIEST MAKES SINGER SEWING MACHINE CABINETS FOR NATIVES OF EVERY COUNTRY

[*Continued on page 102*]

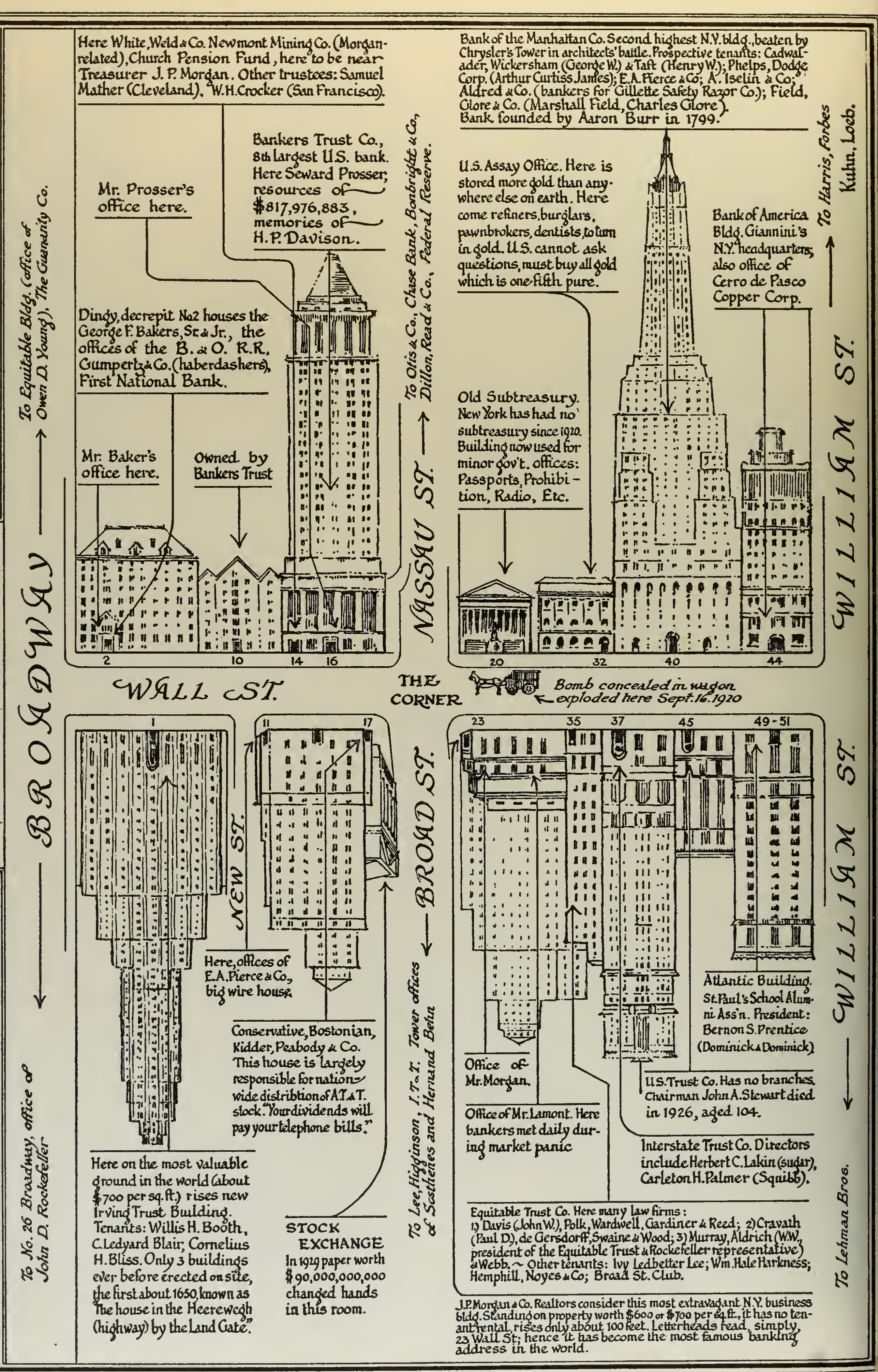
THE MAP OF WALL STREET

Trinity Church is large Manhattan landowner, with properties whose book value is $15,022,236. Rentals total over $1,000,000 annually. Bishop Manning was rector (1908-21).



Vestrymen: John Erskine (Helen of Troy); Thomas C.T. Crain (District Attorney); William Barclay Parsons. Office of Trinity Church Corp. at 72 Wall St.

THE STREET WITH A GRAVEYARD AT ONE END AND AT THE OTHER END THE RIVER



To Equitable Bldg. (office of Owen D. Young), The Guaranty Co.
BROADWAY
To No. 26 Broadway, office of John D. Rockefeller
To Otis & Co., Chase Bank, Bonbright & Co., Dillon, Read & Co., Federal Reserve.
NASSAU ST.
To Harris, Forbes
Kuhn, Loeb.
WILLIAM ST.
2
10
14
16
20
32
40
44
WALL ST.
THE CORNER
1
11
17
23
35
37
45
49-51
NEW ST.
BROAD ST.
To Lee, Higginson; I.T.&T. Tower offices of Sosthenes and Hernand Behn
WILLIAM ST.
To Lehman Bros.

Here White, Weld & Co. Newmont Mining Co. (Morgan-related), Church Pension Fund, here to be near Treasurer J. P. Morgan. Other trustees: Samuel Mather (Cleveland), W.H. Crocker (San Francisco).

Mr. Prosser's office here.

Bankers Trust Co., 8th largest U.S. bank. Here Seward Prosser; resources of — $817,976,883, memories of — H.P. Davison.

Dingy, decrepit No. 2 houses the George F. Bakers, Sr. & Jr., the offices of the B. & O. R.R., Gumpertz & Co. (haberdashers), First National Bank.

Mr. Baker's office here.

Owned by Bankers Trust

Bank of the Manhattan Co. Second highest N.Y. bldg., beaten by Chrysler's Tower in architects' battle. Prospective tenants: Cadwalader, Wickersham (George W.) & Taft (Henry W.); Phelps, Dodge Corp. (Arthur Curtiss James); E.A. Pierce & Co; A. Iselin & Co; Aldred & Co. (bankers for Gillette Safety Razor Co.); Field, Glore & Co. (Marshall Field, Charles Glore). Bank founded by Aaron Burr in 1799.

U.S. Assay Office. Here is stored more gold than anywhere else on earth. Here come refiners, burglars, pawnbrokers, dentists, to turn in gold. U.S. cannot ask questions, must buy all gold which is one-fifth pure.

Bank of America Bldg. Giannini's N.Y. headquarters; also office of Cerro de Pasco Copper Corp.

Old Subtreasury. New York has had no subtreasury since 1920. Building now used for minor gov't. offices: Passports, Prohibition, Radio, Etc.

Bomb concealed in wagon exploded here Sept. 16. 1920

Here, offices of E.A. Pierce & Co., big wire house.

Conservative, Bostonian, Kidder, Peabody & Co. This house is largely responsible for nation-wide distribtion of A.T.&T. stock. "Your dividends will pay your telephone bills."

Here on the most valuable ground in the world (about $700 per sq. ft.) rises new Irving Trust Building. Tenants: Willis H. Booth, C. Ledyard Blair; Cornelius H. Bliss. Only 3 buildings ever before erected on site, the first about 1650, known as "The house in the Heereweg (highway) by the Land Gate."

STOCK EXCHANGE

In 1929 paper worth $90,000,000,000 changed hands in this room.

Office of Mr. Morgan.

Office of Mr. Lamont. Here bankers met daily during market panic

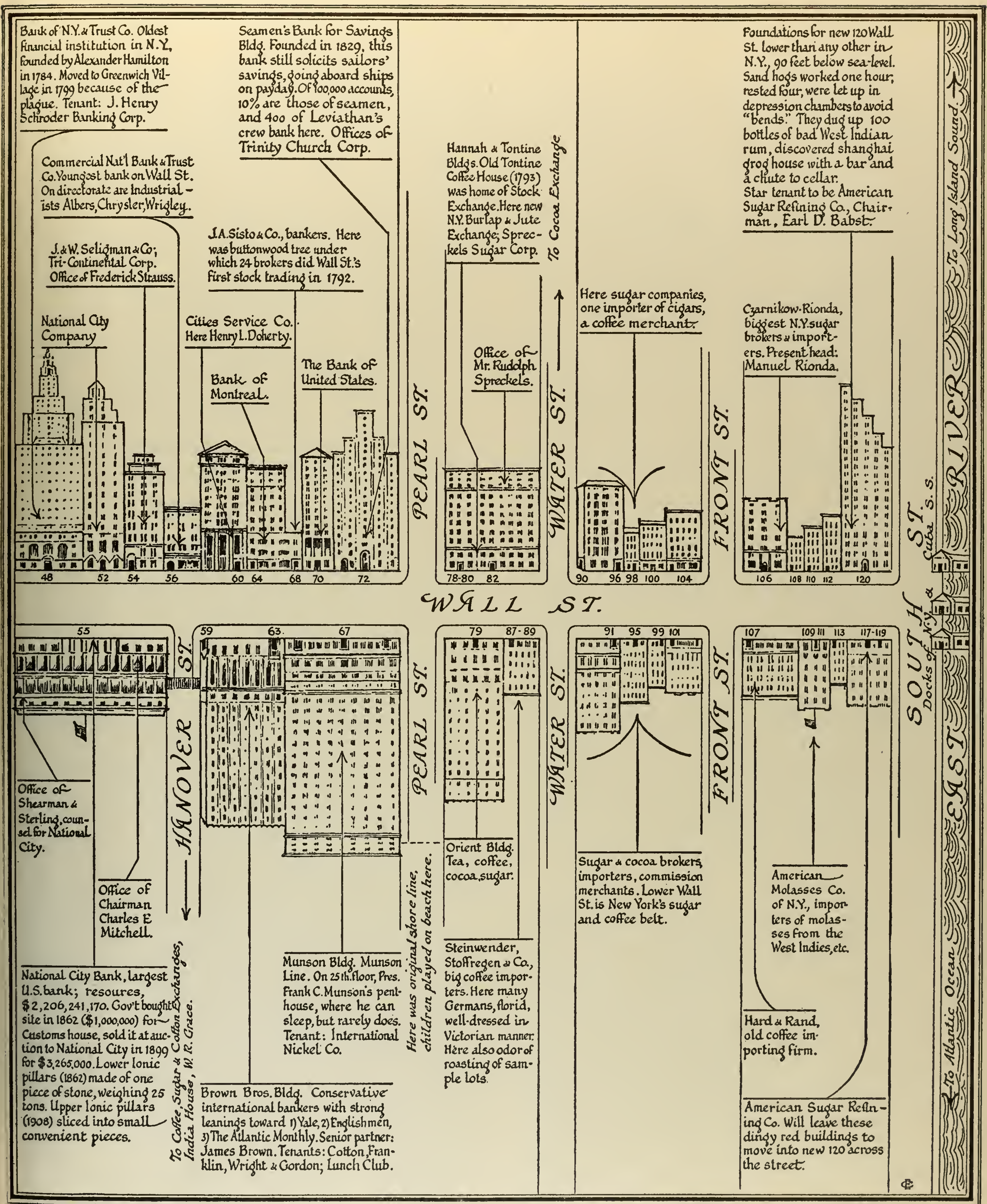
Atlantic Building. St. Paul's School Alumni Ass'n. President: Bernon S. Prentice (Dominick & Dominick)

U.S. Trust Co. Has no branches. Chairman John A. Stewart died in 1926, aged 104.

Interstate Trust Co. Directors include Herbert C. Lakin (sugar), Carleton H. Palmer (Squibb).

Equitable Trust Co. Here many law firms: 1) Davis (John W.), Polk, Wardwell, Gardiner & Reed; 2) Cravath (Paul D.), de Gersdorff, Swaine & Wood; 3) Murray, Aldrich (W.W., president of the Equitable Trust & Rockefeller representative) & Webb. ~ Other tenants: Ivy Ledbetter Lee; Wm. Hale Harkness; Hemphill, Noyes & Co; Broad St. Club.

J.P. Morgan & Co. Realtors consider this most extravagant N.Y. business bldg. Standing on property worth $600 or $700 per sq. ft., it has no tenant rental, rises only about 100 feet. Letterheads read, simply, 23 Wall St; hence it has become the most famous banking address in the world.



Bank of N.Y. & Trust Co. Oldest financial institution in N.Y., founded by Alexander Hamilton in 1784. Moved to Greenwich Village in 1799 because of the plague. Tenant: J. Henry Schroder Banking Corp.

Commercial Nat'l Bank & Trust Co. Youngest bank on Wall St. On directorate are industrialists Albers, Chrysler, Wrigley.

J. & W. Seligman & Co; Tri-Continental Corp. Office of Frederick Strauss.

National City Company

Seamen's Bank for Savings Bldg. Founded in 1829, this bank still solicits sailors' savings, going aboard ships on payday. Of 100,000 accounts, 10% are those of seamen, and 400 of Leviathan's crew bank here. Offices of Trinity Church Corp.

J.A. Sisto & Co., bankers. Here was buttonwood tree under which 24 brokers did Wall St.'s first stock trading in 1792.

Cities Service Co. Here Henry L. Doherty.

Bank of Montreal.

The Bank of United States.

Hannah & Tontine Bldgs. Old Tontine Coffee House (1793) was home of Stock Exchange. Here new N.Y. Burlap & Jute Exchange; Spreckels Sugar Corp.

Office of Mr. Rudolph Spreckels.

Here sugar companies, one importer of cigars, a coffee merchant.

Foundations for new 120 Wall St. lower than any other in N.Y., 90 feet below sea-level. Sand hogs worked one hour, rested four, were let up in depression chambers to avoid "bends." They dug up 100 bottles of bad West Indian rum, discovered shanghai grog house with a bar and a chute to cellar.
Star tenant to be American Sugar Refining Co., Chairman, Earl D. Babst.

Czarnikow-Rionda, biggest N.Y. sugar brokers & importers. Present head: Manuel Rionda.

Office of Shearman & Sterling, counsel for National City.

Office of Chairman Charles E Mitchell.

National City Bank, largest U.S. bank; resoures, $2,206,241,170. Gov't bought site in 1862 ($1,000,000) for Customs house, sold it at auction to National City in 1899 for $3,265,000. Lower Ionic pillars (1862) made of one piece of stone, weighing 25 tons. Upper Ionic pillars (1908) sliced into small convenient pieces.

To Coffee, Sugar & Cotton Exchanges, India House, W. R. Grace.

Munson Bldg. Munson Line. On 25th. floor, Pres. Frank C. Munson's penthouse, where he can sleep, but rarely does. Tenant: International Nickel Co.

Brown Bros. Bldg. Conservative international bankers with strong leanings toward 1) Yale, 2) Englishmen, 3) The Atlantic Monthly. Senior partner: James Brown. Tenants: Cotton, Franklin, Wright & Gordon; Lunch Club.

Here was original shore line, children played on beach here.

Orient Bldg. Tea, coffee, cocoa, sugar.

Steinwender, Stoffregen & Co., big coffee importers. Here many Germans, florid, well-dressed in Victorian manner. Here also odor of roasting of sample lots.

Sugar & cocoa brokers, importers, commission merchants. Lower Wall St. is New York's sugar and coffee belt.

American Molasses Co. of N.Y., importers of molasses from the West Indies, etc.

Hard & Rand, old coffee importing firm.

American Sugar Refining Co. Will leave these dingy red buildings to move into new 120 across the street.

Good Taste in Advertising

Is flouted by the hard fighting George Washington Hill. With what result?

THE present emphasis upon the distribution (as opposed to the manufacture) of merchandise has brought to advertising a new stability, a new prosperity, and a new respect. During 1929 approximately $1,000,000,000 was spent in newspaper and magazine advertising alone ($785,000,000 in newspapers and $215,000,000 in magazines). The American Tobacco Company spent more than $1,000,000 a month on one single product (Lucky Strike cigarettes). Such mergers as Colgate-Palmolive-Peet, General Foods, and particularly Standard Brands have resulted in the formation of extremely large corporations dealing directly with the consumer and largely dependent upon advertising for the distribution of their goods. Advertising, long familiar on Main Street, became recognized by Wall Street as well.

Yet the very prosperity of advertising carries with it a potential menace, and in its very success there was the possibility of a failure. In advertising, as in almost every other American industry, 1929 was a great and bumper year. Yet that year was marked by an almost unprecedented internal advertising dissension. Hardly since the old patent medicine period has the question of advertising ethics been more pointedly raised or more heatedly debated. Such advertising men as Earnest Elmo Calkins of Calkins & Holden, Paul M. Hollister of Batten, Barton, Durstine & Osborn, and Frederick C. Kendall of *Advertising & Selling* found it necessary to institute a "crusade" against advertising which they described as "unethical," but which they obviously considered dishonest. There was a general feeling, in conservative advertising circles, that the goose which laid the golden eggs was not being very well treated, and that the more radical advertisers were sacrificing an ultimate prosperity in favor of an immediate gain. Radicals, on the other hand, argued that the primary purpose of advertising was to make sales and that the long series of tacit restrictions, accepted restraints, and gentlemen's agreements, which had grown up around advertising, were seriously detrimental to its effective selling force.

Mr. Hill's idea

Reference has already been made to the American Tobacco Company and its $12,300,000 appropriations for Lucky Strike cigarettes. As the most powerful survival of that American Tobacco Company, which Thomas Fortune Ryan joined and which the United States Government put asunder, the present American Tobacco Company does about one third of the cigarettes, one third of the smoking tobacco, and one fourth of the plug tobacco business in the United States. Its 1929 sales were in the neighborhood of $200,000,000. Furthermore, the American Tobacco Company is guided by an energetic, hard fighting, precedent-ignoring personality—the personality of its president, Mr. George Washington Hill. There is an old political saying that the King of England reigns but does not govern, that the President of the United States governs but does not reign, and that the President of France has neither the majesty nor the might of office. But Mr. Hill, apparently, both reigns and governs. Most large corporations, for example, have an advertising agency, an advertising manager, and a sales manager, among whom the company's advertising is largely determined. Mr. Hill, too, has an excellent agency (Lord & Thomas and Logan) and advertising department, but, according to his own statement, the basic principles of Lucky Strike advertising were determined by him personally; the central Lucky Strike advertising idea was "his own invention." Even the dance program of the Lucky Strike radio orchestra is rehearsed in Mr. Hill's presence, altered and rearranged according to his pleasure. The importance of this one-man aspect of Lucky Strike advertising is outstanding, because the present conflict in advertising procedure is essentially a conflict between agency tradition and the iconoclasm of an aggressive and determined individualism which stands outside that tradition and is not influenced by its commands and prohibitions.

The Lucky Strike advertising is not the only advertising which has excited the conservative advertiser, but it has certainly been the most alarming, the most sensational, and, from the conventional standpoint, the most subversive. Recent Lucky Strike advertising has fallen into four main divisions. For convenience sake, these divisions may be listed as (1) Toasting, (2) Anti-Sweet, (3) Ancient Prejudice, (4) Double Chin.

Toasting.—Through various vicissitudes of advertising appeal, the Lucky package has consistently carried the statement "It's Toasted." As a result of this toasting (Lucky advertisements maintained) the cigarette was freed of throat-irritating quality, could therefore be smoked freely without injury to the voice. This nonirritation idea was supported with testimonials from singers, actors, and vocalists in general. The idea was not unique (Old Gold cigarettes with their "Not a Cough in a Carload" slogan had much the same appeal), and the testimonials were no more extreme than in many other endorsement campaigns.

Anti-Sweet.—Then, however, in the fall of 1928, Mr. Hill had an idea. As he tells the story, his automobile was halted at a street intersection, and while he was waiting for its progress to be resumed, he saw two women. One woman—stout and unattractive—was eating what Mr. Hill says may have been a pickle, but which, he decided, was more probably a sweet. The other woman—slender and charming—was smoking a cigarette. "Ah," thought Mr. Hill, remembering the boyish figures that were then so much in vogue, "reach for a Lucky instead of a sweet." Soon after, the first of the "Reach for a Lucky" series appeared. Ethical or no, it was one of the most effective campaign themes since the Listerine—Halitosis inspiration. Besides its direct bid for women's trade, it appealed to everyone interested in the question of personal poundage, and it was considerably more plausible than a great many other advertising hypotheses. For after all, a pound of candy makes no one thin, and a pack of cigarettes makes no one fat. But the chief merit of the anti-sweet series lay in its sensationalism. Backed by an almost limitless expenditure, heightened by a series of testimonials (particularly from athletes), the new campaign appeared everywhere, and everywhere rated 100 per cent in attention value. It was not only read; it was fought over. Sugar men, candy men, and Senator Smoot protested. The campaign was made a focal point for an attack on testimonials in general. There were accusations that youth was being misled, the "Lucky Girl" poster was bitterly attacked, and Carl Sandburg saw a misconducted tobacco business resulting in the suppression of cigarettes as a misconducted liquor business had resulted in Prohibition. Amidst all the excitement Mr. Hill remained apparently undisturbed, maintaining that by stirring up so much discussion of sweets, he was really aiding the sale and distribution of sugar products.

Ancient Prejudice.—In the fall of 1929, however, the Lucky campaign shifted from anti-sweets back to its former anti-irritation. Instead of "Reach for a Lucky instead of a Sweet," there appeared the slogan: "An Ancient Prejudice Has Been Removed." The ancient prejudice, it seemed, was the notion that cigarettes hurt the throat. The removal, of course, was the result of the Lucky *toasting* process. The most striking feature of the "Ancient Prejudice" series was its Winsor McCay drawings. Freedom of speech, the advancement of science, the emancipation of women—progress in every form was pictured (in a before-and-after manner) by Mr. McCay, with the advertising text drawing the moral that just as, for instance, women were no longer slaves to male caprices, so cigarettes, through toasting, had been freed from the ancient accusation that they injured the throat. There was such a ghastly discrepancy between the tale and the moral that it lacked any power of conviction. Furthermore, whereas everyone had been more or less interested in sweets and fat, no one was concerned with cigarette prejudices, particularly since the prejudice that once did exist against cigarettes dealt rather with their effect on moral fiber than on vocal chords.

Double Chin.—So Lucky Strike advertising has again swung back to a modification of its dietary appeal. Now, however, it is anti-fat, not anti-sweet. It uses no testimonials, it specifically states that smoking Lucky Strikes will not result in a slender figure, and it attacks not indulgence but overindulgence, directing its fire against all forms of overeating, not merely against the consumption of sweets. It has, however, a slogan, "Avoid That Future Shadow," and a semi-cartoon illustration showing a single-chinned man or woman casting a double-chinned shadow—the ultimate result, of course, of "doing yourself too well." Shortly after the appearance of this new campaign, it was announced from Washington that the Federal Trade Commission had persuaded an unnamed tobacco manufacturer to "cease and desist" from unfair competitive methods, particularly from the use of testimonials in their more artificial form and from too specific statements regarding cigarettes and avoirdupois. The tobacco company in question was not specified, but, regardless of the Trade Commission's report, there is no question but that the anti-fat Lucky Series represents a distinct modification of its anti-sweet predecessor. The double chin was perhaps the happiest thought in the new series, for even though the fashionable figure is not now quite as perpendicular as it was in 1928, double chins have never been and will never be the vogue.

In all the discussion provoked by the various Lucky Strike campaigns, there was never much question but that they were selling Lucky Strikes, or that the most extreme (the anti-sweet) campaign was the best-seller. And here is where the Lucky Strike series is important, not as a phenomenon but as a tendency. Over a considerable period of years, conservative advertising men (especially conservative advertising agency men) had built up in advertising copy, in advertising art, and in advertising themes what might be termed a *tradition of dignity*. The most representative copy was chiefly what is termed *editorial*, a rather loose description which is hard to define, but easy to describe by example: the Scripps-Howard newspaper, the Pennsylvania Railroad, and the Ford aviation campaigns being excellent instances of the type. Considering limitations of space and subject, the writing of these advertisements calls for a very considerable craftsmanship. In illustration, in typography, and in layout, also, advertising standards of taste constantly improved, so much so, indeed, that in many a magazine the advertising pages were considerably more pleasing than the editorial. As far as advertising ideas were concerned, there was a strong prejudice against the controversial, the competitive, the sensational, and against anything which might possibly offend anyone.

This tradition of dignity has by no means vanished, but it has been notably absent from the Lucky Strike campaigns and from various other advertising efforts of less conspicuousness but of similar nature. There was nothing artistic about the Lucky series. Given the central slogan (whether "Reach for a Lucky" or "Ancient Prejudice" or "Shadow of the Future") and the remainder of the copy was purely a matter of routine. The chief typographical requisite was a certain screaming effect and, from an esthetic standpoint, the general appearance of the Lucky series was frankly hideous. And even in its most recent and most moderate form, the Lucky theme would be conventionally regarded as destructively controversial and dubiously competitive.

Yet the cigarette series unquestionably possessed one vital quality which frequently is fatally absent from the *nice* advertisement. That was the quality of force, of power. The weakness of the dignified advertisement was often that it possessed only dignity. Sometimes it gave the impression of having been written primarily to please its authors and only incidentally to please its readers, if any. The modern popular magazine often carries upward of 250 pages, in which any given advertisement must compete with all the editorial pages and all the other advertisements. The national advertisements in the modern newspaper must struggle not only against the news but with countless columns of retail advertising as well. Yet the chances are that virtually every Lucky Strike advertisement that was run was also read. Mr. Hill would say (except that he would not condescend to say it) that he is not interested in literature, in art, in typography, or in composition; that the conventional advertisement consists of bird shot scatteringly fired far over the target's head; and that he would rather get Lucky Strikes into the homes of the smokers than Lucky Strike advertisements into the art directors' shows.

Thus the situation and thus the conflict. The weak spot in the Lucky Strike position is, of course, that advertising of its type tends to become more and more a stunt, or a series of stunts, and that, in an attempt to get attention, the nature and qualities of the product itself become more and more constantly minor considerations. From the ethical standpoint, stunt advertisements do weaken popular faith in advertising, although only those who are extremely pro- or extremely anti-advertising fail to realize that all salesmanship, whether spoken or printed, is subject to discount without animus. From the professional standpoint, stunts tend to subordinate everything to a formula, yet the Old Gold "Blindfold Test" campaign was a very encouraging example of the fact that new tricks do not necessarily kill the old dog. Yet when everything that can be said for the Lucky Strike type of advertising (or for the "Spit" campaign on Cremo cigars, also affiliated with the American Tobacco Company) is said, one feels that the element of good taste cannot be so disregarded without a result which is, on the whole, regrettable.

Money Abroad

Other gods and other governments are the *agents provocateurs* of many foreign fortunes.

IT IS difficult to think of money without thinking of America. On the Continent, indeed, it appears difficult to think of America and to think of anything but money. Yet all great fortunes are not limited to the United States. To a certain extent, conditions in Europe and in Asia are more favorable to the growth of individual wealth. On the Continent, a man may be rich because he is a member of the nobility. In Asia, he will almost certainly be rich if he is even a minor ruler with a European Power behind his throne. Furthermore, even the foreign industrialist has some advantages over his American counterpart. A trust, in this country, is met with suspicion; a cartel, abroad, is met with government support. Competition is no god outside the United States; in a dozen European and South American countries the sale of matches, for example, is a government monopoly administered by a private monopolist—Mr. Ivar Kreuger and his Swedish Match Company. Thus, although generalizations are proverbially vicious, and although many a foreign rich man has passed through a career fundamentally similar to the progress of a Ford or an Eastman or a Rockefeller, fortunes abroad have certainly a more monopolistic tint than fortunes in the United States. A monopolist by the consent of his government; a monopolist by the grace of his god—in one of these two classes the rich men of other nations are more than likely to fall.

If, however, a world tour of foreign wealth begins (as it normally does begin) with the British Isles, the conclusion just arrived at meets with its most severe objections. The English economic theory has, of course, corresponded closely with the American, and England has its conventional "kings" of coal and textiles and steel and particularly of shipping. Yet many of England's fortunes were made in her colonies. Solly Joel went off to Africa and returned with figurative pocketfuls of diamonds, and Sir David Yule went off to India, remained for fifty years in Bombay, and came back the head of some eighty corporations and with control of a large portion of the world's jute. And much of England's native wealth remains in the hands of her landed aristocracy. Rich, for example, is the Duke of Westminster, largely because one of his ancestors acquired large properties in London and evolved a system of ninety-nine-year leases, the leased properties, including improvements, reverting to the lessor at the termination of the lease.

Where in England the rich have purchased the titles, in France the titles have lost the riches, so that France is wealthy in her industrialists, especially Louis Loucheur, whose utility companies supply most of France with electric light and power. M. Loucheur has also lapped over into railroads and (through his brother-in-law, André-Gustave Citroën) into automobiles. Other French industrialists have become prominent in more traditionally Gallic activities—the Gillets in silk, the Meniers in chocolate, and M. Coty in perfumes.

Puddles and frogs

Northern European fortunes run more to basic industries efficiently monopolized. Fritz Thyssen and the German steel cartel; Carl Bosch and the German dye trust (I. G. Farbenindustrie); Jacob Martin Michael, who cornered the post-War German mark; and Ivar Kreuger, whose match monopolies have already been mentioned, are typical instances of what, in this country, would be regarded as shocking examples of combinations in restraint of trade. It should always be remembered that neither France, Germany, nor Italy is as large as Texas, and that Europe has lately been as poor as the proverbial church mouse. Thus the industry of any given country is not likely to support more than one great corporation and Senator Agnelli in Italy, for instance, can make 50,000 Fiats a year and thereby nearly monopolize the Italian automobile business. Given a concentration of population, a scarcity of capital, and a public opinion which is more absorbed with politics than with industry, and each of the various little puddles is bound to produce its one big frog.

The customer is wrong

In South America, too, there is not much room on the top. Juan Vicente Gomez, with his estimated $100,000,000 is a very rich Venezuelan, has also been the virtual dictator of Venezuela for some twenty years. In Brazil nearly every industry except the coffee industry is connected with Count Francisco Matarazzo, whose interests range from perfumery to railroads. Countries that are not primarily industrial offer a rare opportunity to one gifted industrialist.

Once out of Europe and east of Suez, all the normal laws of production and distribution vanish, especially the one about the customer being always right. Leaving the monopolistic, we have arrived at the absolute. The Nizam of Hyderabad (a British Indian principality) can even say, "Off with his head," with a fair chance that the head, if it is a native head, will actually "off." Whatever the oriental's title may be—Aga or Shah or Maharajah or Lama or Nizam, he is always royal and he always collects large royalties. Sometimes, like the Aga Khan, he spends most of his time in Europe and learns to golf. Sometimes, like the Gaekwar of Baroda, he tries to improve the condition of his people. Sometimes, like the aforementioned Nizam of Hyderabad, he is just a good old Arabian Night with few redeeming features. His wealth runs largely to precious stones, especially diamonds, in which form it does nobody any good and is an excellent example of a socially frozen asset.

In the following pages, thirty large fortunes are briefly noticed. Their locale varies from sober London counting houses to secluded Tibetan monasteries. Their origins range from the daughter of Mohammed to inflated post-War currency. They include tin and diamonds and steel and electricity and ocean liners and the process of taking up the white man's burden and the dark man's resources. The best "mystery men of Europe" and several persons widely recognized as "richest in the world" are included among them. Most of them (American-trained Mr. Kreuger is a notable exception), having made their money, go in for politics or pleasure or both. Which proves, no doubt, that abroad there is no materialism

Thirty Large Fortunes

Are here presented, with their possessors, in a parade headed by England.

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SOLOMON (SOLLY) BARNATO JOEL (above) left London's Jewish "Petticoat Lane" and started diamond hunting in South Africa almost 50 years ago, and has a share in most of the diamonds that come out of South Africa today. In 1884 his brother Jack was involved in an Illicit Diamond Buying case, jumped bail, and returned to England. Woolf, his other brother, was shot and killed in 1898.

Meanwhile, he and the Barnatos, his partner uncles, prospered, although they were accused of having aided in the raid which brought on the Boer War, and were certainly sympathetic to Cecil Rhodes' plans of British African Empire. They formed the firm of Barnato Brothers, of which the Joel brothers are now sole partners. Barney Barnato, en-route from South Africa to England, jumped overboard, and Harry Barnato died in 1908, leaving the Joels about $12,500,000.

Both Solly and Jack are best known through their racing stables. Solly divides his time between his office at Austin Friars, London, and the capital of his diamond kingdom at Capetown. From Africa he has brought back not only diamonds but such a curious cargo as a zebra, two secretary birds, and a meerkat. These household pets may help compensate for a family life not without its troubles. His once-favorite daughter, Doris, eloped with a chauffeur; a son, Stanhope, secretly married an American girl; and another son, Lieutenant Woolf Solomon Joel, died at sea after going bankrupt on an allowance of $12,000 a year. There remains Eileen, Solly's twenty-two-year-old daughter, after whom Solly's yacht, *Eileen*, is named. But the yacht *Eileen* used to be the yacht *Doris*.

LORD GLENTANAR (below, right), SIR STUART AUCHINCLOSS COATS, and SIR THOMAS GLEN-COATS (below, left), are present heads of J. & P. Coats, Ltd., whose Scotch (Paisley), American (Pawtucket and Newark), and Canadian (Montreal) factories turn out a considerable percentage of the cotton thread that holds on the world's buttons. The business was founded in 1824 by James Coats (James the First) whose sons, James the Second, Peter, and Thomas, all went into the business. Succeeding generations produced a great many Coats, of whom the first Lord Glentanar (father of the present Baron) was the wealthiest. His estate totaled 4,642,263 pounds. Six other Coats who left more than a million pounds were Peter Coats, 2,526,270; James Coats Jr., 1,964,745; Sir James Coats, 1,773,870; Archibald Coats, 1,499,125; Daniel Coats, 1,234,802; Sir Thomas Glen-Coats (first baronet), 1,725,606.

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Acme

ENGLAND'S richest woman is probably MISS GLADYS YULE (below, right) and England's most active business woman (below) is the VISCOUNTESS RHONDDA (pronounced Rontha). When Sir David Yule, Calcutta jute king, died in July, 1928, he left his daughter some $100,000,000, intricately and deliberately tangled up in Indian jute holdings. Thus he spared his daughter the penalty of death duties (inheritance tax). Just as adequately is she spared any concern about Bengal labor or weather conditions, or current quotations on the New York Burlap and Jute Exchange. She lives in strict solitude with her mother in Hertfordshire, where she collects dogs, horses, and zoo animals. The bales of matted, tangled fiber are now the proper concern of the present ruling jute kings, J. P. Morgan & Co.

Long before the death of the late D. A. Thomas, first Lord Rhondda, Welsh coal king, his daughter Margaret had become conspicuous as an industrial executive. She is chairman of seven companies, director of many another. Her feminist principles once got her into jail, and later almost got her into the House of Lords.

Rich, too, is Lady Houston, widow of Sir Robert Houston (shipping), whom she firmly believes was murdered and on whose grave she has inscribed the words: *Who died most mysteriously*. For some time she refused to pay death duties from her $35,000,000 inheritance. Finally, after a luncheon with Winston Churchill, she gave him a check for $7,500,000. Mr. Churchill has said, "Death is almost the only friend of the Treasury."

Wide World

International

HUGH RICHARD ARTHUR GROSVENOR, Second Duke of Westminster (nicknamed Ben d'Or), has consistently conducted himself according to the best traditions of motion picture dukes. From Paris to Monte Carlo to Biarritz to Nice flits His Grace, to the accompaniment of old wines and young women. Greatly he enjoys tossing diamond rings from his yacht for cabaret girls to dive after. He has had two wives, two divorces, and innumerable guests and visitors. In January was announced his engagement to Miss Loelia Mary Ponsonby, daughter of Sir Frederick Ponsonby. His Grace has frequently fretted London society, especially when he sold Gainsborough's *Blue Boy* for about $750,000 to Henry E. Huntington, of California, U. S. A. The family fortune rests largely upon the ownership of some 600 acres in the West End of London, a holding comparable in importance to the Astor properties in New York.

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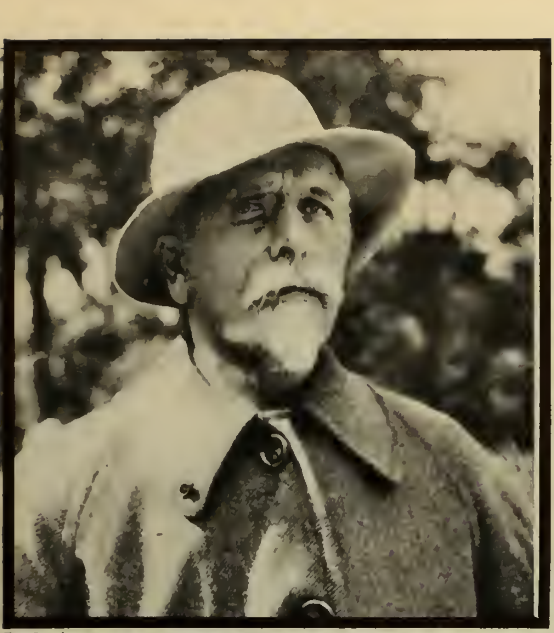
France, Germany


P. & A.

ZACHARIAS BASILEIOS ZAHAROFF, Sir Basil Zaharoff (above), at one time controlled Monte Carlo and might also be said to have held at least a large minority interest in the World War. Indeed, Sir Basil has been interested in almost every war since the Russian-Turkish in 1877, and after many comparatively small wars had made him a very rich man, the World War brought him into that select circle whose various members have all been reported as world's richest. He was born (of Greek parents) in Asia Minor; he has his title from England and his residence in Paris and has lately spent his time being wheeled around Monte Carlo in a bath chair.

Sir Basil got his real start in life when in 1877 he was made Balkan agent for the Nordenfeldt Gun and Ammunition Co., Ltd., of England, which became a great international armament company when it merged with the Maxim Gun Co. Thus it acquired the patents of Hiram Maxim, who began by inventing a mousetrap that would catch several mice at the same time and progressed to the invention of his famous gun, which could kill 600 men in one minute, provided, of course, that a man got in front of each bullet. The Maxim gun rapidly became standard throughout Europe, although the King of Denmark had to do without it because of the cost of firing it. Li Hung Chang, Chinese prince, discouragingly remarked, "This gun fires too rapidly for China." But the Great and many Minor Powers bought many Maxims. In 1897 the Maxim-Nordenfeldt combination was absorbed by Vickers and what with the Spanish-American War and the Boer War the business continued profitable. Then came the Russo-Japanese War, various Balkan wars, and finally the World War.

After the War, Sir Basil got himself connected with possibly the only military enterprise in which he lost instead of profited. He is believed to have brought Greece into the War and is thought to have influenced Lloyd George in securing England's tacit consent to the Greek-Turkish campaigns after the main war was over. If popular impression is well founded and Zaharoff personally underwrote the post-war Greek operations in Asia Minor, grievous must have been his disappointment. For the Turks killed or captured nearly the entire Greek Army.

With all his titles, power, and money, Sir Basil always remained far behind the scenes and was commonly termed the "Mystery Man of Europe." A few years ago, when a French newspaper asked for his life story, he replied: "M. Zaharoff, n'ayant pas de voix, ne peut pas chanter."

FRITZ THYSSEN (below) inherited the Thyssen steel business from his father, August Thyssen, who died in 1923. August managed his business single-handed, shared none of his authority, left what was estimated as the largest personal fortune in Germany. Now Fritz has even more money than August, but the business is no longer a personal affair. Shrewdly, Fritz merged the family properties with other companies in Germany's great steel cartel. During the French occupation of the Ruhr, Herr Thyssen was taken prisoner by the French, became a popular hero. He is the second son of August, but of the elder son, August Jr., little is heard.

International

Keystone

JACOB MARTIN MICHAEL (above), during the 1923 inflation in Germany, succeeded in establishing a money corner. At a time when it took a dozen billion marks to buy a cup of coffee, Herr Michael accumulated marks by the trillions and quintillions. The Government finally stabilized this mark (at 4,200,000,000,000 to the dollar) and established it as legal tender while the new marks were being printed. Thereupon Herr Michael, with a practical monopoly of the old currency, loaned his no longer worthless paper at 20 per cent interest and emerged worth some 100,000,000 in the new gold marks.

HENRI LETELLIER (below) designs gowns for women and casinos for resorts. He inherited *Le Journal* from his father, and is backing the *Boulevardier* for his former secretary, Erskine Gwynne. Once, after one of the most skillful of Parisian couturiers had designed a gown for a woman of M. Letellier's acquaintance, M. Letellier decided that the creation was notably imperfect, brought the girl back to the couturier and had her attired according to his specifications. M. Letellier is about 60, which makes him rather an elderly *boulevardier*. But his appearance, as this photograph testifies, is one which accepts youth and age with equal grace, and his temperament is still very Latin.

Keystone

LOUIS LOUCHEUR (at right) is frequently described as the richest man in France, although the Gillets of Lyons (silk and rayon) might dispute the honor. He dominates the French electric light and power industry. The War interrupted his electrification of French railroads, but brought him into public life, via munitions and coal. He is the brother-in-law and backer of André-Gustave Citroën, whose automobile factories turn out about 70,000 cars a year. Under his direction the war-time Russian railroad between Petrograd and Murmansk was constructed by Austrian war prisoners, who spent their time laying ties and contracting typhoid. So many of them died that the railroad has been said to rest on a foundation of bones. M. Loucheur is as cultivated as he is wealthy and writes poetry during his few moments of leisure. He has been in many of France's many Cabinets, and is at present Minister of Labor.

P. & A.

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North, South, and Central Europe

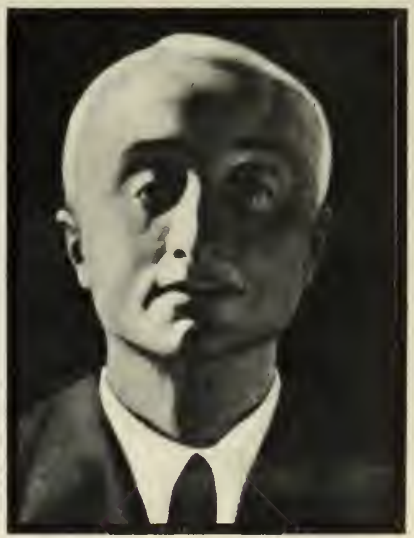
THOMAS BAT'A (Batya) (above) is another of Europe's many "Fords," but Mr. Bat'a, who makes not automobiles but shoes, in some ways justifies the comparison. His factories at Zlin, Czechoslovakia, can turn out 80,000 pairs of shoes a day. More important, however, is the fact that Mr. Bat'a, combining American mass production methods which he learned at Lynn, Mass., with industrial paternalism in one of its most extreme manifestations, can make for from $1.80 to $2.40 a shoe which costs Lynn manufacturers from $2.65 to $3.75. (Lynn is most concerned with Mr. Bat'a because both he and the Lynn shoe manufacturers make the same type of shoe—low-priced novelty McKays for women.) Furthermore, other European shoe men have so well imitated the Bat'a technique that U. S. shoe manufacturers anticipate the arrival of some 6,000,000 foreign-made shoes during 1930.

Mr. Bat'a himself has a certain tendency toward the naïvely sententious, is fond of such aphorisms as "Business is a service to the people," "Struggle is the father of all," and "Our customers are our masters." His low production costs are partly the reflection of low wages, which run from $5.40 to $13.50 a week, or about one-third the corresponding American wage. Yet Mr. Bat'a's employees live well. At Zlin Mr. Bat'a has built homes, hospitals, gymnasiums, libraries, a theatre, a motion picture house, playgrounds, and schools. In effect, he is a benevolent despot, operating a feudal system over which he rules much like the barons of old. It is a system which depends a good deal upon the docility of labor, and would not last long in this country. But, combined with an integration which ranges from control of raw material to the operation of some 400 retail stores, and also with the most ultra-efficient American machinery and factory methods, it supplies one of the relatively few forms of foreign competition which the American manufacturer almost admits as unmeetable.

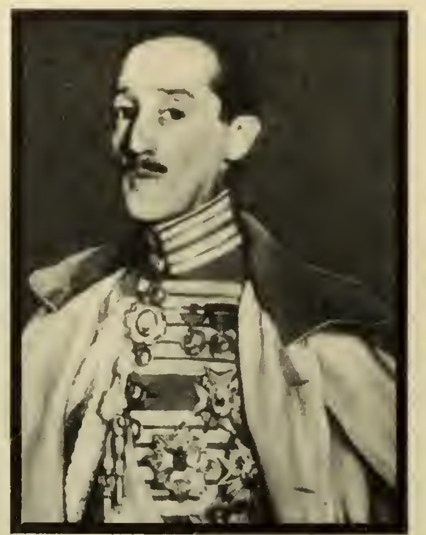
JACOBO MARIA DEL PILAR CARLOS MANUEL STUART FITZ-JAMES (right) is 10th Duke of Berwick and 17th Duque de Alba de Tormes. In the accompanying Zuloaga portrait, the Duke looks very much the Grandee that he is. With interests ranging from dachshunds to the new Spanish cabinet, in which he makes his bow to politics, His Grace is also on the same corporate executive committee as Sosthenes Behn. The corporation is the Standard Electrica Sociedad Anonima, a subsidiary of the International Telephone & Telegraph Company, which in 1924 took over the Spanish telephone and telegraph system, beginning its career in international communications.

U. & U.

GIOVANNI AGNELLI (right) has been termed the "Ford of Italy," although his production would represent almost a shutdown for the Ford of America. But Senator Agnelli's Fiats are Italy's leading automobile, 30,000 Italians labor in his 12 factories, and he builds nearly 50,000 cars a year. It was at one time rumored that General Motors was going to acquire the Fiat works, but that Fascist nationalism prevented this invasion of American capital.



From a Portrait by Casorati



Portrait by Zuloaga © Keystone

GIUSEPPE VOLPI DI MISURATA (left) supplies most of Venice with its electric light and power. For services as peace-treaty plenipotentiary he became Count Volpi; later became Governor of Tripoli, which he supplied with railroads and turbines. A town in Tripoli—Vulpia—is christened for him. In 1925 he became Italy's Minister of Finance and put the lira back on a gold basis. Count Volpi left the Cabinet in 1928, and is at present occupied with his utility interests.

P. & A.

RICCARDO GUALINO (left), president of the Snia Viscosa of Turin, is one of the world's largest producers of artificial silk. Man's recently discovered ability to make a silky fabric without the silkworm's help has contributed to many large fortunes, including those of the Courtaulds in England, the Gillets in France, the du Ponts in America, and the Gualinos in Italy. Aside from his textile business, Signor Gualino owns the finest private art collection in Italy. His art gallery, like Andrew Mellon's, is not only an esthetic treasure but represents also a substantial investment, the value of which is certain to appreciate with time.

Keystone

IVAR KREUGER (above) has made millions of dollars from a product so apparently insignificant that it is given away in tremendous quantities. The product is the match, and of every four matches struck each day throughout the world, three have proceeded from Mr. Kreuger's Swedish Match Company and its 225 subsidiaries. A more imaginative match man might be overpowered at the thought of his billions upon billions of little fire sticks spurting into flame all over the world, but Mr. Kreuger is a hard-headed and unromantic Swede who does not even carry matches himself.

Many of Mr. Kreuger's early years were spent in America, where he helped build the Flatiron Building, Macy's, and the Plaza and St. Regis hotels. In 1913 he entered the match business (via his father's not very large or successful match factory) and soon merged several small match-makers into one group. Then he merged the merger with Sweden's big match company (Jönköping-Vulcan), thus creating a virtual monopoly of Swedish matches.

Monopolies, indeed, have been Mr. Kreuger's specialty. In many countries of Europe and South America, the distribution of matches is a monopoly of the government. Mr. Kreuger loaned money to Poland, Peru, Greece, Ecuador, Hungary, Esthonia, Jugoslavia, Rumania, and Latvia, and to all these countries he now supplies the official matches. In 1927 he loaned France $75,000,000, got the match concession for 20 years. One of Mr. Kreuger's customers is an African chieftain, whose black face appears upon every match box that Mr. Kreuger sends to him.

Mr. Kreuger has a motor boat, three yachts, one island, and apartments in Stockholm, New York, Paris, and Berlin. He is a bachelor with few social interests; photographers do not snap him at Deauville or Biarritz. Over the door of his office is a carved torch. It represents almost the only gesture that Mr. Kreuger has made.

India, China, and Tibet

© Keystone

AGA MOHAMMED (above), Sultan, Shah, and Khan, is the spiritual head of some 68,000,000 Moslem Indians, or about one-third the population of British India. But he also golfs, tangoes, plays tennis and roulette, and owns an extensive racing stable. In December the Aga Khan married Mlle Jane Andrée Carron, a Parisian dressmaker, the marriage representing a union of a Roman Catholic and a man who is virtually the Mohammedan Pope.

Although the Aga Khan spends most of his time in Europe, he retains a tremendous influence in India, as he is a direct descendant (in the forty-eighth generation) of the first Mohammed, founder of Islam. His descent is through Ali, who married Fatima, daughter of the Prophet. So holy is the Aga Khan that the water in which he has bathed is also holy, and is preserved and sold to the Faithful. Each year Mohammedan priests gather at Aga Hall (the Aga Khan's Bombay residence), and there the bathing and selling of the water is ceremoniously performed. For the water, the Aga Khan is paid literally his weight in gold. As he weighs about 220 pounds and as gold is worth about $20 a troy ounce, his weight nets him about $52,800. A London expert once valued his rubies at £50,000,000, whereupon the Aga Khan, somewhat ruffled, replied that he had been offered £100,000,000 for them. At the outbreak of the World War, he urged Mohammedans to remain faithful to the Crown.

Keystone

THE NIZAM OF HYDERABAD (above) is the ruler of the most populous Indian state, having the power of life and death over some 13,000,000 subjects. Inasmuch as he owns the Hyderabad mint, railways, post office, and army, can impose and collect all import and export duties, has about 5,000,000 acres in crown lands and collects tribute on most of the remaining real estate in his jurisdiction, his reputation as multibillionaire is perhaps not exaggerated. A miserly Midas, he keeps much of his wealth in the traditional form of bags of gold, each bag containing 2,000 rupees (about $665). This treasure is stored in a fireproof vault, guarded by several thousand troops. As is customary in many oriental principalities, a holiday is declared whenever a royal child is born. During one year, this happy occasion is said to have been celebrated no less than 300 times.

Keystone

MAHARAJAH SIR SAYAJI RAO GAEKWAR SENA KHAS KHEL SHAMSHER BAHADUR OF BARODA (above) unlike many an oriental potentate, has thought long and frequently of his people, laboring steadily to improve their education and their agriculture. To the Western mind, however, which insists that its Easterners must be Asiatic, the Gaekwar is perhaps most notable for his treasure of precious stones. He has a cloak woven of pearls and inlaid with diamonds, rubies, and emeralds. Originally intended as a covering for the tomb of Mohammed, its stones have been appraised at $5,000,000. The Gaekwar has also a $100,000 diamond cap and $60,000 gloves. His diamond collection includes the Brazilian Star of the South ($400,000), and his palace is guarded by cannons of solid gold.

U. & U.

SIR JOSEPH LO PA HONG (above) is reputedly China's richest man, is certainly China's most famous Catholic. The Catholic Church began its missionary activities in China several centuries ago and has now several million Chinese communicants. Lo Pa Hong attended the 1926 Chicago Eucharistic Convention, is a Papal Knight, and head of the Chinese United Catholic Association in Peiping. He has baptized 7,000 children.

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THE DALAI LAMA (above) and the PANSHEN LAMA (right) are the two heads of the Buddhist religion, both being considered reincarnations of Buddha himself. The Dalai Lama, reigning at Lhasa, Tibet, is probably the richer of the two, as Buddhists throughout Tibet, Mongolia, and China have for centuries been sending him precious stones, silks, and other costly gifts, and none of this accumulated treasure hoard has ever been touched. The Panshen Lama (with whom the Dalai Lama is not on good terms) has been for some years wandering about China, sacred in his person but vague in his authority. In December he dined with Governor-General Chang Hsueh-liang at Mukden. Among the beverages served at the banquet was hot tiger's blood.

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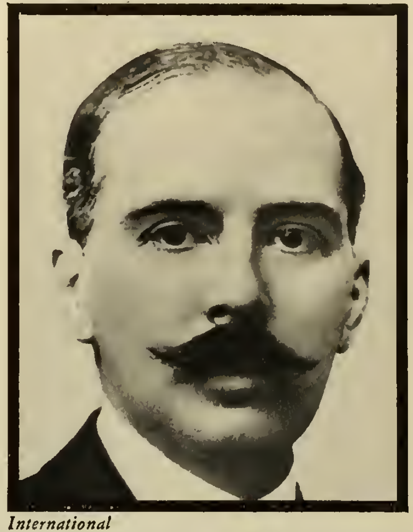
South America and Canada

Wide World

IT MAY BE SAID of Brazil that most of its industries (except coffee growing) were founded by COUNT FRANCISCO MATARAZZO (above). His was the first factory of canned lard; he created Brazil's flour industry, its oil industry, brought new life to its fabric industries. Today his family are manufacturers, bankers, shipowners, importers and exporters. They own rice mills, starch mills, flour mills, rayon factories, alcohol distilleries, nail factories, lithographic print factories, sugar mills and plantations, motion picture companies, perfumery factories, railroads, ships. Born in Italy in 1854, emigrating when he was a youth, Count Matarazzo is today Brazil's most representative industrialist. Sometimes to amuse himself and to reassure himself of his financial power, he agitates, then calms the produce exchanges. He is still the active head of the wide flung Industrias Matarazzo.

Not to be overlooked in Brazil are the Guinle family, whose wealth comes largely from public utilities. Carlos is the best known, blonder than most of his countrymen, owner of the first Isotta-Fraschini that sped along Brazilian roads, and famed as a lover of sports.

ARGENTINE wealth is always a complicated family affair. Signal among wealthy families are the TORNQUISTS (bankers), of whom the bespectacled, sport-loving CARLOS ALFREDO (below, with wife) is the head. Ranking with the Tornquists are the Devotos, who are of Italian extraction, the Basabildasos, the Basualdos, who have been hosts to the Prince of Wales, and the Martinez de Hoz, less rich but always prominent because of unassailable social position. But no matter who the Argentinian may be, he will surely read *La Prensa*, South America's and Buenos Aires' leading newspaper, published by EZEQUIEL PAZ (right). *La Prensa* has a circulation of 325,000 (400,000 on Sundays) and runs from 36 to 72 pages an edition. Politically it is grimly independent. It was the only South American paper to receive by cable the full text of the Einstein theory, the original Dawes report, the Coolidge Tacna-Arica ruling. Among its institutional services are a free medical clinic, a free library, a music school, and free legal consultation.


International

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Keystone

A NOTED CANADIAN is Lady Eaton, widow of Sir John Eaton, whose father founded Canada's huge chain of Eaton mail order stores. Another is Sir Frederick Williams-Taylor, with his pride of ancestry, and Patrick Burns, the packer, befriender of musicians (one singer called herself Burnada in his honor) and friend of the Prince of Wales. There is the brilliant, cynical Izaak Walton Killam, publisher of the *Mail & Empire*, and Sir Joseph Flavelle, president of the National Trust Co. and chairman of the board of the Canadian Bank of Commerce. But of all Canadians, SIR HERBERT HOLT (above), friend of the late Capt. Alfred Loewenstein, is probably the wealthiest, certainly the most colorful. He is banker and public utility man and is active in the affairs of more than 140 companies. Aside from his work, to which he devotes 14 hours a day, he has few interests, though hospitals and educational institutions have known his generosity. He is hot-tempered and physically powerful, two qualities which, in conjunction, are sometimes dangerous. It is, perhaps, because of this that reporters do not like to interview him. He is apt to throw them downstairs.

Wide World

BECAUSE OF ITS COSTLY communications service, little is known by the rest of the world about Venezuela. But much of that little centers about JUAN VICENTE GOMEZ (left), for 20 years, under various titles, the country's dictator. But nowadays he dictates only from practice; his all absorbing interest is crossbreeding cattle in the hope of finding for Venezuela the most perfect cow. His wealth has been estimated at $100,000,000.

Some 30 years ago, SIMON I. PATIÑO (right), a bill collector, found himself unable to collect $250 from a debtor, accepted certain mountain lands instead. His employer discharged him after making him pay $250 and Mr. Patiño, disconsolate and impoverished, went to his mountains and looked at them. Having looked, he dug, and having dug, he found tin. Thus was founded Patiño Mines and Enterprises Consolidated and established Bolivia's greatest fortune, estimated at $150,000,000. Today Mr. Patiño gives less thought to tin than he does to his diplomatic duties in Paris.

Wide World

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Aluminum Company of America

A corporation which paternally includes an industry; whose best customers are also its chief competitors.

THE story of steel cannot be written in terms of the United States Steel Corporation. The story of copper contains many chapters not related to Kennecott or Anaconda. But the story of aluminum in this country is solely the story of the Aluminum Company of America. With trifling exceptions, every pound of virgin aluminum produced in the United States has been, and is being, produced by the Aluminum Company. Every use of aluminum has been pioneered and popularized by this same corporation, and in its laboratories have been developed the strong alloys, so vital to aluminum's present and future. American industry now uses aluminum to the extent of more than 350,000,000 pounds a year. For the progress and the performance of this new metal, industry has unquestionably the Aluminum Company to thank.

Photographs by Margaret Bourke-White
TAMPING DOWN SAND IN A SAND MOULD FROM WHICH WILL COME AN ALUMINUM CRANK CASE

Yet criticism, rather than gratitude, has been the Aluminum Company's usual lot. It is commonly regarded as a monopoly, and therefore bad; and as a Mellon monopoly, and therefore worse. Radicals, alarmists, and political opponents, scenting an obscure but invidious connection between Mr. Mellon's public position and private interests, convey the impression that the nation's minor currency may be at any moment aluminized, with Mr. Mellon's aristocratic countenance emblazoned on every nickel and dime. No sooner is aluminum mentioned than the conversation turns to monopolies in general, to the Aluminum Trust in particular, and how this ogre is taking at least the aluminum bread pans out of the people's mouths.

Like all prejudices, the prejudice against the Aluminum Company represents a fact exaggerated and a truth distorted. But it is also obvious that no such feeling can exist entirely without foundation. The Aluminum Company is admittedly the sole producer of aluminum in this country. Its position as sole producer was guaranteed, between 1888 and 1909, by a patent monopoly on the basic process of reducing aluminum from its ore. The Mellon interest dates from 1890, when the Mellon family exchanged cash for Aluminum Company stock. Andrew Mellon has no position with the company now, but R. B. Mellon (Mellon National Bank, Pittsburgh) and Richard K. Mellon are directors, and the Mellon family is a large (yet a minority) holder of Aluminum Company stock. The corporation's position as a monopoly is qualified by competition with a continuous stream of imported aluminum and by the large and growing supply of aluminum recovered from aluminum scrap. Its status as a Mellon monopoly is rather more than qualified by the Mellons' interest not reaching even an operating control. Yet the Aluminum Company undeniably dominates the aluminum industry, and with its progress and profits the Mellons are unquestionably concerned.

Furthermore, the Aluminum Company directs a thoroughly integrated business. The reduction of aluminum ore constitutes only a fraction of its activities. It makes and sells such products as aluminum cable, furniture, kitchen utensils, foil, and powder for paint. It makes and sells in semifinished form such products as propellers, pistons, and various other machine parts. There is nothing original about a producer being also a fabricator and merchandiser. But the Aluminum Company's position as chief source of aluminum does create the rather peculiar situation in which the company's best customers are also its most active competitors.

Consider, for example, the position of the General Fireproofing Company of Youngstown, Ohio, which makes, among other products, aluminum furniture. General Fireproofing's aluminum furniture is, of course, in direct competition with the Aluminum Company's own aluminum furniture. Yet General Fireproofing makes a profitable practice of buying its aluminum from the Aluminum Company and, except for the scrap market and importations, has no other source of supply. If the Aluminum Company regarded competition as an evil to be eliminated, it might put General Fireproofing in an extremely awkward position. And it is generally true that any manufacturer of aluminum products will find himself in active competition with his major source of material. "Aha!" cry antimonopolists. "Behold an entire industry in one clutching corporate hand!"

To this integration complaint, the Aluminum Company has, of course, an obvious answer. Competition, says the Aluminum Company, is something to be encouraged, to be fostered. Whenever an aluminum chair or piston or skillet, regardless of who made it, is sold, the Aluminum Company observes an increase in the market for its aluminum and a forward step in aluminum's progress. At least one Aluminum Company competitor—Bohn Aluminum and Brass Corporation—sells nearly as much of its aluminum product (Bohnalite pistons) as the Aluminum Company sells of its corresponding

LADLING MOLTEN ALUMINUM

product (Lynite pistons). But no matter how often Bohnalite and Lynite salesmen clash, or how often Bohnalite salesmen make the sale, the Aluminum Company plans no dark methods of putting Mr. Bohn out of business. Mr. Bohn is a good customer. Mr. Bohn helps to sell the automobile industry on the merits of aluminum. The Aluminum Company has been accused of filling orders from its subsidiaries and holding up supplies of its competitor-customers. It follows, however, precisely the opposite procedure, on the theory that the production and promotion of aluminum is its main objective, to which the sale of aluminum products is incidental. To use its position as sole producer in order to become sole manufacturer and distributor would seem to the company like biting off its face to please its nose.

Birthday of a monopoly

Thus the aluminum controversy revolves chiefly about the Aluminum Company's power as a source from which most aluminum flows. The Aluminum Company maintains that only as sole producer could it have developed aluminum, in a forty year period, from a laboratory curiosity to an industrial staple. Detractors maintain that all monopolies are evil and that it is inimical to any industry to have its operations so largely overshadowed by one corporate entity. To determine something of truth's elusive position between these two extremes, it is necessary to consider aluminum's past, to go back to the day when the Aluminum Company (which was as much, indeed more, of a monopoly on the day of its birth than it is at present) was considered not at all a menace and probably a good deal of a curiosity.

For certainly in 1888 the newly formed Pittsburgh Reduction Company (the present name resulted from a reincorporation in 1907) represented an intensely speculative enterprise. From 1855 to 1888 aluminum, produced in minute quantities, had sold at an average prohibitive price of sixteen dollars a pound. Typical fabricated aluminum products were a helmet of a king of Denmark, the rattle for an infant prince of France, and the shiny cap on the Washington Monument. There was no dearth of aluminum in the earth's crust (it is fifth commonest of metals) but it clung so tenaciously to its compounds that the extraction of pure aluminum was a chemical, not an industrial, process.

In 1886, however, Charles Martin Hall had discovered a method by which aluminum could be commercially produced. A common compound of aluminum is aluminum oxide, found in a dirty yellow-brown mineral called bauxite. Mr. Hall, working in a homemade laboratory (the woodshed of his father's home at Oberlin, Ohio), separated the oxide from the bauxite, added cryolite, a fluoride of aluminum, and applied an electric current. The oxide resisted the passage of the current, turned the electrical energy into heat, and eventually broke down into its aluminum and oxygen constituents. Thus, with what must have been an extremely rudimentary electric furnace, Mr. Hall solved the problem of commercial aluminum production and laid the foundation of his later fame and

THIS ALUMINUM WILL BE PART OF A VACUUM CLEANER fortune. Both, as might be expected, were considerable.

When, in 1887 and early 1888, Mr. Hall failed to finance his pending patents for the electrolytic production of aluminum in Lockport, New York, he was introduced, through his friend, Mr. Romaine C. Cole, to Captain Alfred E. Hunt, then identified with the steel interests of Pittsburgh, Pennsylvania, and an owner in the Pittsburgh Testing Laboratory, metallurgical testing engineers. Captain Hunt interested a few of his business associates, and a company was incorporated under the laws of Pennsylvania, with a capital of 200 shares of $100 par value, to try out these patents on a practical scale. The first meeting of the subscribers to the stock of this company was held on August 8, 1888, and the name adopted was the Pittsburgh Reduction Company. The organization meeting, held on October first, elected officers with Captain Hunt as president; Mr. Horace W. Lash, first vice president; Mr. Robert J. Scott, second vice president; Mr. George W. Clapp (also an owner in the Pittsburgh Testing Laboratory), treasurer; and Mr. W. S. Sample, secretary. These gentlemen, with Mr. Millard Hunsiker, were the first board of directors.

Early mechanics

It was agreed between this board and Messrs. Hall and Cole that if the patents could be successfully worked the company would increase its stock to 10,000 shares, of which 57 per cent would be given for the patents, 15 per cent to the original subscribers, and 28 per cent would be held in the treasury for plant enlargement. Mr. Cole was made the first general manager, and Mr. Hall was appointed electrician. A plant site was rented on Smallman Street, Pittsburgh, between 32nd and 33rd Streets, and equipment purchased consisting of two 60 horsepower boilers and a 125 horsepower engine, with two 25 volt 1200 ampere generators from the (then) Westinghouse Electric Light Company. The list of the company's present plants is impressive: Badin, N. C., pig aluminum (from alumina), ingot; Buffalo, N. Y., sand castings, furniture, shingles, and roofing materials; Cleveland, O., sand castings, permanent mould castings, (Lynite pistons, etc.), die castings; forgings (Lynite connecting rods, etc.); Detroit, Mich., sand castings, moulding; Edgewater, N. J., sheet, screws, bolts, etc., rivets, file guides, collapsible tubes; Fairfield, Conn., sand castings; Garwood, N. J., die castings; Massena, N. Y., pig aluminum (from alumina), ingot, wire, cable, beams for structural use, bar, and rod; New Kensington, Pa., ingot, sheet, tubing, cooking utensils (Wear-Ever), foil; bottle caps (Goldy Seals, Alco caps, R-O Seals), bronze powder (Albron), moulding, Mason jar caps, special equipment (tanks, coils, etc.); Niagara Falls, N. Y., pig aluminum (from alumina), ingot, sheet, planographic plates; Alcoa, Tenn., reduction plant, rolling mills.

Due to the illness of Mr. Cole, his position as general manager was soon abolished, and Mr. Hall was made superintendent, with Mr. Arthur V. Davis (later president and now chairman of the board), then an employee of the Pittsburgh Testing Laboratory, assistant superintendent.

The first metal was made on Thanksgiving Day, 1888, and for the rest of the year, and well into 1889, production and sales alternated in importance with a constant need for additional capital for enlargement. The taking out of foreign patents and their protection, together with domestic patent litigation, occupied the time of the executives and directors of the company to a large extent so that comprehensive financing was impossible.

ERIE
FOUNDRY CO
ERIE PA

FORGE HAMMERS POUND DOWN ON AN ALUMINUM PROPELLER

FOOD FOR MANY A SAILOR IS COOKED IN ALUMINUM KETTLES

Mr. Mellon's mortgage

On September 19, 1889, the capital stock was increased to 10,000 shares and subscriptions to 2,250 shares invited. Additional capital gradually became interested. Mr. D. L. Gillespie, Thomas L. Shields, E. M. Ferguson, and T. Chalmers Darsie, well-known Pittsburgh business men, were elected to the board, and finally on January 28, 1891, Mr. A. W. Mellon took sufficient interest in the company to finance a mortgage on their new plant at New Kensington, Pa., and to join the board. Shortly after, Mr. R. B. Mellon became identified with the company and, after the death of Captain Hunt, was its president. The settlement of the patent litigation with the Cowles Electric Smelting and Aluminum Company by decision in favor of Hall and the starting of the first plant using water power at Niagara Falls put the company well on the way to finally successful operation.

The early prospects of the Pittsburgh Reduction Company could not be considered bright. For although these were the only men who could produce aluminum, they were also the only men who had any use for it. Solemn indeed was the moment when the partners put their first week's production (100 pounds) in the safe and wondered what to do with it. Nobody wanted aluminum. It had, to be sure, certain advantages. It was light—only one-third the weight of steel and less than one-third the weight of copper. It was noncorrosive—air and rain could not reduce it to a mass of rust. It was a good conductor of heat and a fair conductor of electricity. On the other hand, it was still extremely expensive. The first selling price was five dollars per pound for 96 per cent pure, and four dollars per pound for 88 per cent to 96 per cent pure metal. The price was rapidly reduced to fifty-five cents a pound, and at present is about twenty-five cents. A comparison between eighteen-cent copper and four-cent steel illustrated the greater first cost of any aluminum product, although of course a pound of aluminum has about three times the volume of a pound of steel. Furthermore, aluminum itself was suspect and unknown. The pure metal was soft; its early alloys experimental and uncertain. Nothing could be done with aluminum that could not be done with steel or copper or even wood. Aluminum was competing with long established materials that sold for a fraction of aluminum's price and that had a thoroughly standardized metallurgical and fabricating technique. The problem of producing aluminum was solved. The problem of selling it had only begun.

Collar buttons and dog collars

The Aluminum Company was therefore forced into the fabricating field. The manufacturers of copper cable saw no sense in buying aluminum to make aluminum cable. The manufacturers of tin pots and pans were equally reluctant to shift over to aluminum. Therefore, the Aluminum Company manufactured its own cables, its own kitchen utensils, and sold them to an uninterested and incredulous world. Nor was this necessity for pioneering a necessity only in aluminum's younger days. Within recent years, for example, the Aluminum Company designed, introduced, and popularized aluminum furniture. It is fair to say that in every major use of aluminum, the Aluminum Company has been compelled to demonstrate the practical possibility of using aluminum by actually making and selling the aluminum product itself. In many of its fabricating and selling activities it has encouraged other manufacturers to follow in its footsteps. In some (such as cable) it has not. Yet its early integration was necessary to its existence, and nearly every manufacturer of aluminum products today is traveling along a pathway which the Aluminum Company first explored.

A GIANT KETTLE FOR SOME CHEMICAL LABORATORY'S BREW

Early uses of aluminum included chiefly kitchen utensils, cables, machine parts, and novelties. These last are not now so important, but they were extremely vital in the critical early period. The novelty manufacturer, often operating on the proverbial shoestring basis, will take chances with a new material and is today nursing the young stainless steel industry through its infant stages just as he was one of the supports of aluminum's childhood. An aluminumware display of 1894 included collar buttons, looking-glass and picture frames, penholders, candlesticks, match boxes, house numbers, and spoons. Other later miscellaneous uses were aluminum fishing reels, helmet and cap badges, artificial limbs, thermometers, skate bodies, hypodermic syringe cases, phonograph recorders, dog collar trimmings, and horseshoes, while earnest but unsuccessful efforts were made to popularize aluminum musical instruments, glove fasteners, combs, hairpins, and cartridge cases. There is still a considerable aluminum novelty business—aluminum playing cards, for instance, being popular with yachtsmen and other out-of-door card-players, inasmuch as they prevent the distressing possibility of having a long, established suit blown into the bay by a passing breeze.

It was in the field of transportation that aluminum really began to take rank as a major metal. The bicycle rage of the nineties constituted aluminum's first transportation phase and is still an excellent illustration of its outstanding advantage—

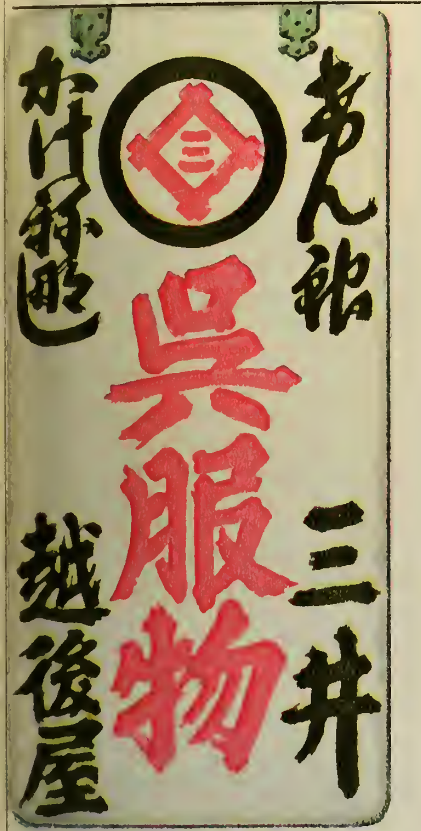
[*Continued on page 134*]

BARON TAKUMA DAN, PRIME MINISTER OF THE MITSUI EMPIRE

BURLINGAME
PUBLIC

House of Mitsui

Cynics maintain that the last able Mitsui died in 1694, but Baron Hachiroyemon is planting a million saplings as a prelude to the family's next millennium.



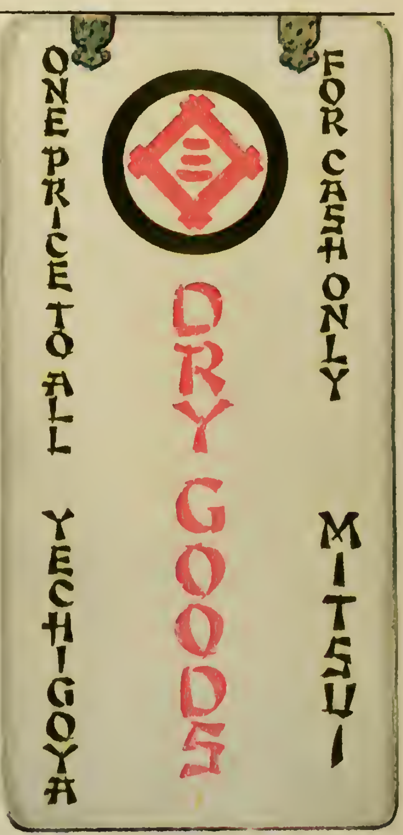
THERE is no business enterprise anywhere which is at once so vast and so diverse as the House of Mitsui in Japan. Its agencies abroad outnumber the embassies and consulates of the Empire. Deposits with the Mitsui Bank exceed the revenue from all the cities of Japan for 1929. In the constant safekeeping of the Mitsui lie one fifth of all goods warehoused in the Empire. A quarter of Japan's commerce, both import and export, is handled by the Mitsui Trading Company, and 40 per cent of her exports of coal. Under the firm's flag or charter are three and a quarter million tons of shipping—as large a tonnage as the whole mercantile marine of France.

The House of Mitsui is thus a merchant empire. It has been prosperous for thirteen hundred years and conspicuously rich for more than a quarter of a millennium—roughly since Shakespeare's time. Today the House is ruled by the Senior Baron Hachiroyemon, 14th Baron Mitsui. He does rather less work than the King of England. His prime minister of trade is Baron Takuma Dan, sometimes called the "Morgan of Japan."

Heaven's Son, and Earth's

An empire must have a capital. Clop, clop, clop, the common folk of Tokyo clatter cheerfully about on wooden sandals, dodge Yellow Cabs and creaking 'rickshas, cling to overcrowded trams, seem always happy and bustling, yet keep a corner of their hearts for reverence for the "Son of Heaven," the Sublime Emperor Hirohito, 124th descendant of the Sun Goddess. A romantic moat encircles the Imperial Estate in the very center of Tokyo. Surrounded by four million subjects, His Majesty dwells as remotely as though in the moon. But the Son of Heaven is not unconscious of another estate hard by, rising on an artificial hill a little to the south. Instead of a moat there is an equally effective rough stone wall, topped by sharp bamboo spikes. Here is the citadel of a clan whose members were once feudal men-at-arms, next and always traders, and finally the Barons Mitsui. Between them and the Son of Heaven is a link of peculiar strength. The Senior Baron Mitsui might be called the "Son of Earth."

Dai Nippon is the sounding Japanese ideogram for the "August Land of the Rising Sun." When the massive entrance gates of the Mitsui estate groan open, it is a long winding way among fragrant pines and placid lotus ponds to the *dai yashiki*, the "August Mansion" of the Senior Baron. Only personages who are *dai*—august in business, rank, or statecraft—ever pass the gates. But the Mitsui are hospitable if not democratic. For a guest of the consequence of the Prince of Wales or Thomas W. Lamont—and both have been their welcome guests—they string thousands of paper lanterns among the pine trees. As our hats, sticks, and overcoats are magically whisked out of sight by jerkily bowing second butlers, we advance into the Grand Salon, never suspecting that the magnificent Gobelin tapestries with which it is richly hung were woven, not in France, but by clever minions in Japan.



The Senior Baron enters, immensely to the manner born. Silk and sugar, coal and ships are less to him a business than a trust. He is 73, and yet he recently sanctioned huge expenditures to plant a million saplings in Korea. He knows that he will be dead long before they become valuable trees. But he must plant them as a prelude to the Family's next millennium.

Like all the Mitsui he is slender, with a high nose somewhat arched, and eyes the shape of falling raindrops, the upper eyelid especially arched. These traits are the stamp of the authentic Japanese aristocrat. They reveal a relatively pure descent from the Malay conquerors who first enslaved and finally mismated with the aboriginally white Japanese.

Dinner *chez les Mitsui*

The Senior Baron moves with cordial affability among his guests. At dinner he is the courteous and ceremonious host, pledging the health of each table companion before at length the banquet has come to its orderly end. English is spoken at his table, but not by the Senior Baron. Perhaps he has forgotten it (in his youth he studied engineering at greasy first hand in the mills of New Brunswick, N. J. and Lowell, Mass.); perhaps he never liked it. Softly and rhythmically the accents of French or Japanese fall upon the room; there are no bursts of laughter, no crescendos of argument *chez les Mitsui*. After dinner no guest would be surprised if the Senior Baron should display his latest water color painting or sing a classic war song of Old Japan.

Provinces of the Mitsui Empire

MITSUI GOMEI KAISHA (Mitsui Holding Company, the "Brain of the Family Empire")

Departments:

- Secretariat
- Archives
- Research
- Accounts
- Audits
- Supplies
- Real Estate
- Forests
- Formosa (operating directly the Formosa Development and Tea-Manufacturing Co.)
- The Peiping Representative

Affiliates:

- SHIBAURA SEISAKUSHO (Shibaura Engineering Works, jointly owned with the International General Electric Company of America, the Mitsui having control)
- HOKKAIDO TANKO KISEN KABUSHIKI KAISHA (Hokkaido Colliery & Steamship Co., Ltd., producing 10 per cent of Japan's coal and operating 15 steamers. Mitsui interests control 70 per cent of this company, which in turn controls the Nippon Seikosho)
- NIPPON SEIKOSHO (Japan Steel Works, jointly owned with the Armstrong, Whiteworth, and Vickers interests of Great Britain. Capacity: 1,000,000 tons of steel per annum)
- OJI SEISHI KABUSHIKI KAISHA (Oji Paper Manufacturing Co., Ltd. The first company incorporated in Japan [1872], and first to make foreign style paper. Dividend range since 1912: not less than 15 nor more than 50 per cent per annum)
- NETTAI SANGYO KABUSHIKI KAISHA (Tropical Produce Co., Ltd. A Malaysian rubber-growing enterprise, owning several plantations, one of the largest covering 8,093 acres)
- DAI NIPPON SERUROIDO KABUSHIKI KAISHA (Dai Nippon Celluloid Manufacturing Co., Ltd.)

I. MITSUI GINKO (The Mitsui Bank, Ltd.)

II. MITSUI BUSSAN KABUSHIKI KAISHA (the Mitsui Trading Company, the "Heart of the Empire of Mitsui," described on the stationery of their New York and London offices as "Mitsui & Co., Ltd.")

European Correspondents: (Formed as autonomous corporations to avoid the French and German "double taxation" of foreign firms)

- SOCIETE ANONYME FRANÇAISE BUSSAN—Lyons and Paris
- DEUTSCHE BUSSAN AKTIENGESELLSCHAFT—Hamburg and Berlin

Subsidiaries:

- TOYO MENKA KABUSHIKI KAISHA (Oriental Cotton Trading Co., Ltd.)
- TOYO RAYON KABUSHIKI KAISHA (Toyo Rayon Co., Ltd. A new Mitsui enterprise [1927] with a present plant capacity of eight metric tons of rayon thread daily)
- TAIWAN SEITO KABUSHIKI KAISHA (Formosan Sugar Manufacturing Co., Ltd.)
- NIPPON SEIFUN KABUSHIKI KAISHA (Nippon Flour Mills, Ltd.)
- TAISHO KAIJO KASAI HOKEN KABUSHIKI KAISHA (Taisho Marine and Fire Insurance Co., Ltd.)
- ONODA CEMENT KABUSHIKI KAISHA (Onoda Cement Co., Ltd.)
- TOYOTA SHOKKI KABUSHIKI KAISHA (Toyota Loom Mfg. Co., Ltd.)
- YUASA CHIKUDENKI KABUSHIKI KAISHA (Yuasa Storage Battery Co., Ltd.)

III. MITSUI KOZAN KABUSHIKI KAISHA (Mitsui Mining Company, Ltd.)

Subsidiary Mines: Innumerable

Substances mined: Coal, iron, copper, zinc, sulphur, silver, gold

IV. TOSHIN SOKO KABUSHIKI KAISHA (Toshin Warehouse Company, Ltd.)

V. MITSUI SHINTAKU KABUSHIKI KAISHA (Mitsui Trust Company, Ltd. A relatively new enterprise [founded 1924], but already the largest Japanese trust company with property and money held in trust amounting to yen 389,300,547. Count Kabayama, the company auditor, is one of Japan's delegates to the London naval conference)

VI. MITSUI SEIMEI HOKEN KABUSHIKI KAISHA (Mitsui Life Insurance Company, Ltd. Another new enterprise [1926], and still small, but policyholders already number 46,870)

Baron Dan turns gravely to the Senior Baroness. A daughter of the rich Viscount Mayeda, she typifies the Japanese ideal of beauty. Her face and her nose are long, mouth wide and straight, lips rather thick, and complexion fashionably pallid. It was a younger and less discreet lady of the Mitsui who confided in French to a banquet guest, "It is the best that the directors attend to all the business. That is well understood. The Baron could veto, but it is impossible that he would. He has never done that." Every Thursday afternoon, from two until four or six, Baron Dan confers with the directors, presides as chairman over the cabinet of the Mitsui empire.

Potent No. I

Policemen spread respectful Japanese grins and keep on grinning as the limousines of the directors thread their way through Tokyo's narrow Suruga-cho to the doorway of No. 1. The impressively low white marble building suggests 23 Wall Street, serves as a reminder that relations are increasingly close between the House of Mitsui and the House of Morgan. When their leanings were more toward Barclay & Company, Ltd., of London, the Mitsui of 1902 went in for their English red brick bank, which was shaken down by what Japanese gentlemen now call the "seismic fires" of 1923.

On a clear day Baron Dan can swivel 'round from his desk and behold the glorious, pinky-white cone of the Most Sacred Mountain, Fuji-san. (Only the commonalty call it Fujiyama.) The view is so excellent that the Mitsui have jealously held this site for nine generations. They used it for their 17th century Mitsui drapery store, and cleverly induced the greatest artists of the time to paint the store along with Fuji (see p. 80). The new Mitsui Building has just been completed by James Stewart & Co. of New York; architects, Trowbridge & Livingston. All concerned hope and believe that it is earthquake-proof. It houses primarily the Mitsui Bank and the highest executive offices of the Mitsui corporations (see chart).

Courtesy George Marvin
THE SENIOR BARONESS MITSUI . . .

Courtesy George Marvin
TOKUTARO SAKAI, AN EPISCOPAL MINISTER, IS BARON DAN'S SPOKESMAN

Business–Religion–Business

A small business may prosper without a soul, but scarcely a great one, certainly not an empire of trade. Once American business was considered soulless, but that idea has begun to seem old-fashioned. The personalities of corporate empires like General Electric are increasingly felt, and before many years may be considered akin to soul. It is interesting to see how the Mitsui have steadfastly preserved this intangible quality through two and a half centuries of big business.

In the first place every son of the Mitsui, as he comes of age, proceeds to the Family Shrine and at the climax of a long impressive religious ceremony swears the following Family Oath:

In obeisance to the precepts of our Forefathers, and in order to strengthen the everlasting ancestral foundation of the families of our House, and to expand the enterprises bequeathed to us by our Forefathers, I here solemly vow in the presence of the August Spirits of our ancestors that as a member of the House of Mitsui, I will observe and follow the Constitution of our House, and that I will not wantonly seek to alter it. In witness whereof, I now take the oath and affix my signature thereto in the presence of the August Spirits of our ancestors.

There is no challenging the wisdom of the Mitsui Family Constitution. It dates from the 17th century, but has been revised and harmonized with modern conditions by the Family Council several times, most recently in 1900. Among its most important precepts are the following:

I. *The members of the House should deal with one another in close friendship and with kindness. Beware lest contentions among the kin will in the end ruin the entire House.* As is well known, the founder of the House of Rothschild laid a similar injunction upon his sons.

II. *In making marriage, incurring debts, or underwriting others' debts, act always according to the advice of the Council of the Family.* Regarding divorce the Council's advice is always the same. Not one is recorded in the annals of Mitsui.

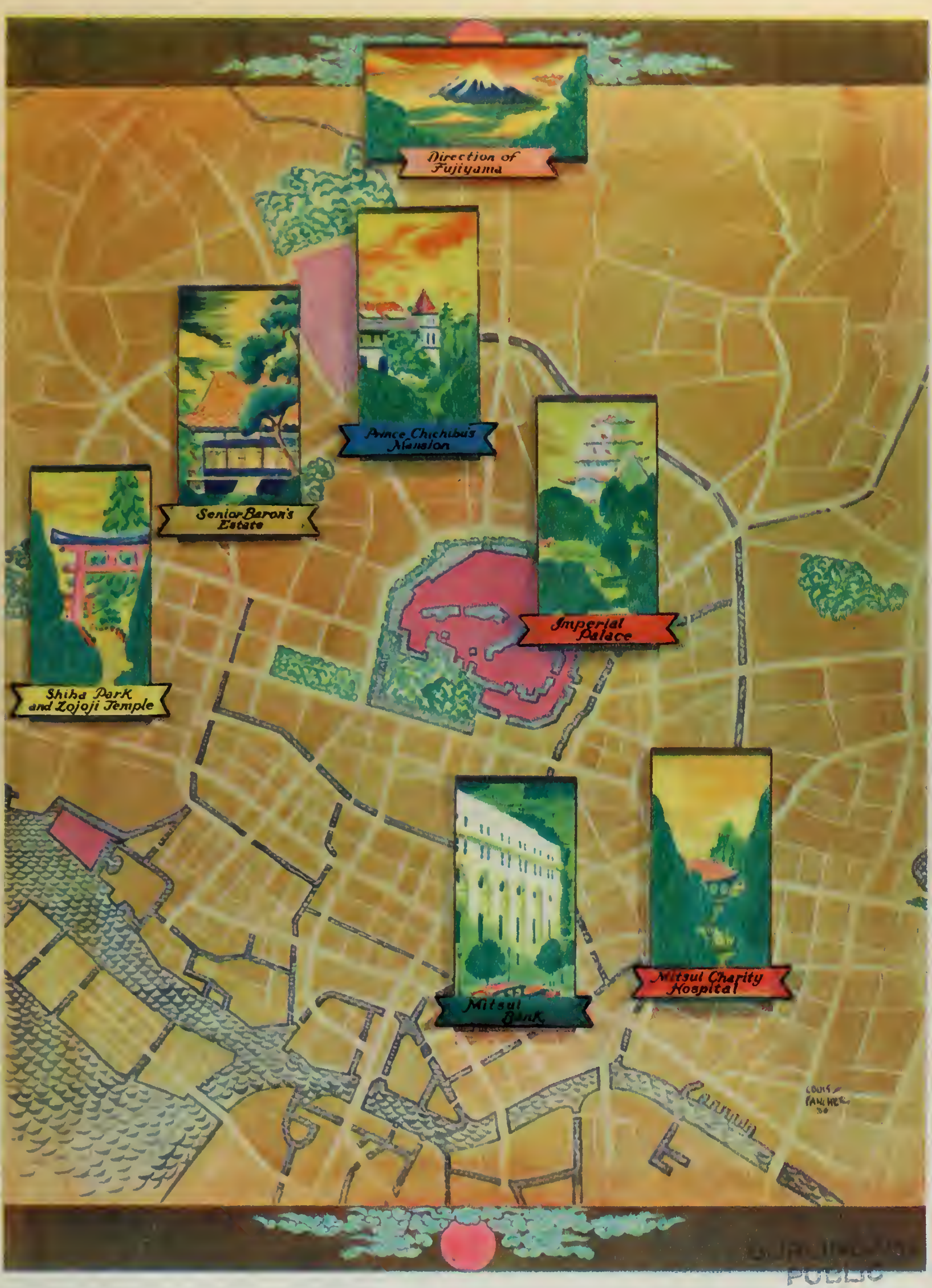
III. *Unless one concentrates, one fails. Our House has its own enterprises which are ample to provide for any man's life. Never touch another business. The life work of a man lasts as long as he lives. Therefore, do not, without reason, seek the luxury and ease of retirement.* Of the hundreds of Mitsui menfolk, it is commonly said "they all work at something," many, of course, in subordinate positions under executives who are not members of the Family.

IV. *The essential of a business enterprise is to employ men of great abilities and take advantage of their special talents.* Cynics and detractors try to maintain that the last really able Mitsui was Takatoshi the Great, who died in 1694. If so, the family's success in always managing to employ "men of great abilities" is all the more remarkable. Among their greatest finds was Rizayemon Minomura, a 19th century predecessor of Baron Dan as prime minister of the Family.

One day the talented Rizayemon was called upon to reorganize the Shobundo concern, whose head had committed *harakiri*. Almost the only liquid asset seemed to be a tearful seventeen-year-old daughter of extraordinary beauty. What to do?

By introducing her to the Imperial Minister of Finance, whose mistress she saw fit to become, a lever was created. Scandal-tongued Tokyo says that by leaning on the lever, Rizayemon moved the Government to grant to the Mitsui

Courtesy George Marvin
. . . AND THE SENIOR BARON



THE MITSUI MAP OF TOKYO. HERE ARE SKETCHES OF THE CITY'S IMPERIAL AND INDUSTRIAL MAGNIFICENCE—THE PALACE, PRINCE CHICHIBU'S RESIDENCE, SHIBA PARK, AND THE CENTERS OF MITSUI CULTURE, CHARITY, AND ENTERPRISE. IN THE LOWER PART OF THE MAP CAN BE SEEN THE WIDE AND SHALLOW SUMIDA RIVER

Bank the right of issuing paper notes. What is certain is that the authorized *Brief History of the Mitsui Bank* describes Rizayemon as a reformer who extirpated "objectionable practices and usages that had crept into [the Mitsui] business and had been increasing with the growth of the establishment." He also built the gorgeous and garish Mitsui-Gumi House (see p. 77), a gem of architecture in the Victorian seventies.

V. *You have been born in the Land of Gods, worship your Gods, revere your lord, love your country, and do your duties as a citizen . . . If there be among you any evil doer, deal with him accordingly at the Council of the Family.* The Council of the Family is made up of representatives of the eleven constituent families which compose the House of Mitsui. It meets once a month in the Mitsui Bettei, a secluded villa on a small, detached estate in the Shiba ward of Tokyo. In the chair, the Senior Baron Hachiroyemon Mitsui, president of the Mitsui Gomei Kaisha (holding company). On his right, Mr. Genyemon Mitsui, 63, president of the Mitsui Ginko (bank). His hobby is classical script writing, and he has the best collection in Japan of antique Chinese script, enough to fill a museum. On the Senior Baron's left, Mr. Morinosuke Mitsui, hobby—fencing, president of Mitsui Bussan Kabushiki Kaisha (trading). Next to him, Mr. Gennosuke Mitsui, president of Mitsui Kozan Kabushiki Kaisha (mining), an adept at classical *no* dancing, who can whang his wooden sword with the best. Across the table, Baron Jutaro Mitsui, a watercolorist like the Senior Baron, and president of Toshin Soko Kabushiki Kaisha (warehouses). Hanging about in the offing may be young Benzo Mitsui, a member of the board of directors of Mitsui Bussan. He collects birds. His wife is the women's golf champion of Tokyo. A good many people used to like her parties when she lived in New Rochelle and he "did something" in the office of Mitsui Bussan at 65 Broadway.

The Morgan of Japan

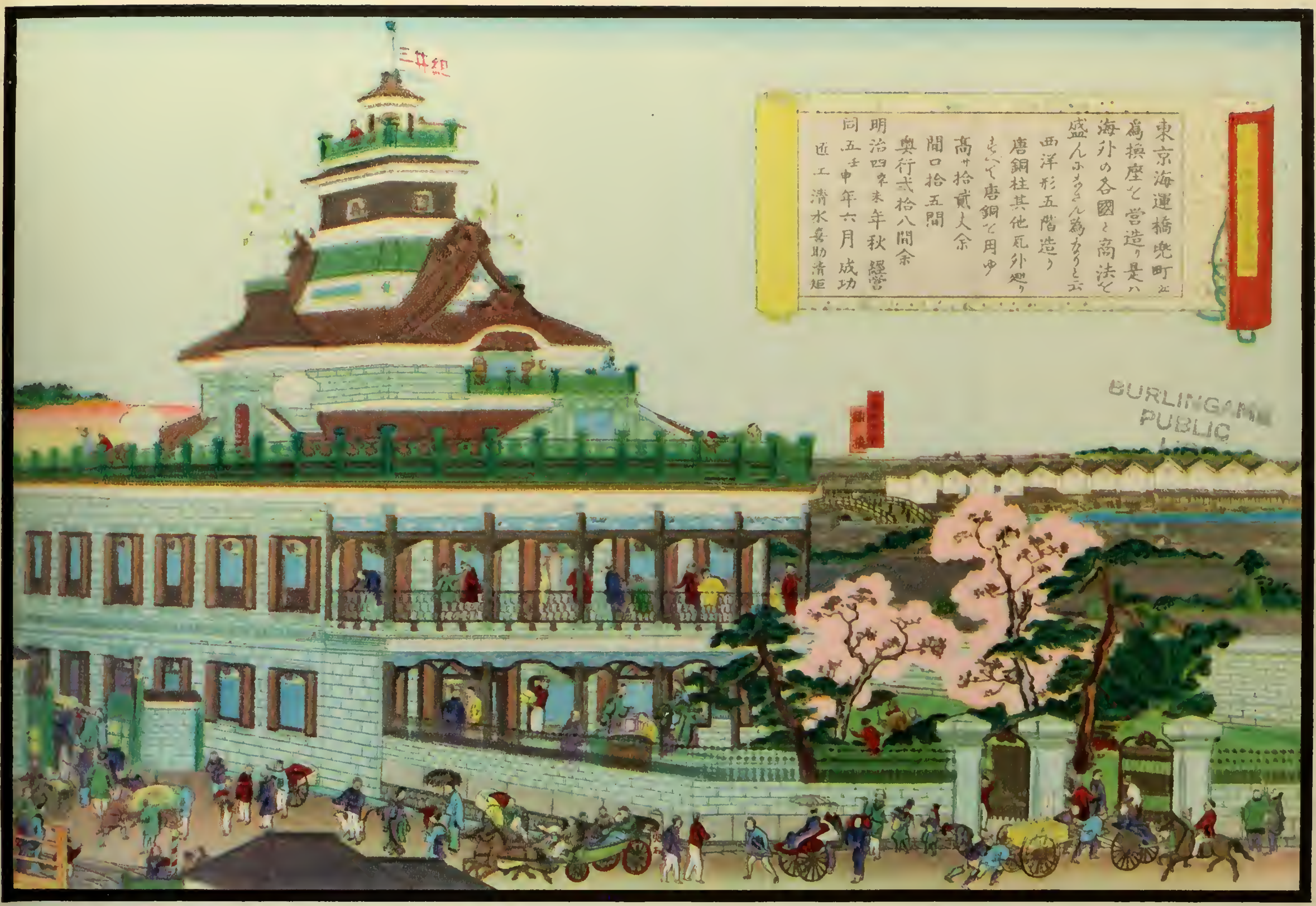
All these gentlemen are august, but they follow the advice of Baron Dan. Probably the "Morgan of Japan" will be introduced to the distinguished guest by his spokesman-partner, Mr. Tokutaro Sakai, one of the directors of Mitsui Gomei Kaisha and president of the Harvard Club of Tokyo. This amazing personage is the Mitsui's foremost contact man with the Christian world. To prepare himself for the job he was not only graduated from Harvard but got himself duly ordained an Episcopal minister. In sonorous pulpit tones he presents "Dr. Takuma Dan."

The great doctor (of engineering) seems a gentle little man, slight and low-voiced. The Japanese have made affectionate, poetic sayings about his taciturnity. "He asks questions with his eyes," is one, and another, "He is as quiet as a wistful child." The face and hands might be those of a musician. He absolutely does not look like "Big Business." His salary is negligibly small, but in good years his bonus is a good half million yen ($250,000), which probably equals, in the Japanese luxuries it will buy, a million-dollar New York income.

The perspicacious Hon. Cyrus Woods, famous "Earthquake Ambassador" of the United States to Japan, says of Baron Dan: "He is a business giant, one of the really great men of his time. He thinks clearly and has the faculty of getting to the root of a matter quickly, brushing aside the immaterial chaff. I have never known him to attempt to fool either himself or anyone else. His sincerity and modesty are unequalled."

When the business giant was aged 13 he accompanied a Japanese mission to the United States. "Although of such tender age, he was the most prominent member of the party," writes a eulogist, "because his father was a great counselor to the Feudal Lord of Fukuoka. He diligently attended school and was soon graduated from the Massachusetts Institute of Technology. He then became a professor of engineering at the Imperial University of Tokyo."

Professor Dan got out of the classroom when the Government appointed him director of the newly formed Mining Bureau of Fukuoka, his father's bailiwick. When the Mitsui bought this entire mining district from the Government at one clip, Baron Dan naturally became chairman of the Mitsui Mining Company. About twenty years ago the then Mitsui prime minister, Baron Masuda, began to decline in health, and Baron Dan was chosen his successor by the Family


三井組
東京海運橋兜町ニ
爲換座ヲ営造リ是ハ
海外の各國と商法ヲ
盛んにせんが為なりと云
西洋形五階造リ
唐銅柱其他瓦外廻リ
もつて唐銅ヲ用ゆ
高サ拾貳丈余
間口拾五間
奥行弐拾八間余
明治四辛未年秋 經營
同五壬申年六月 成功
匠工 清水喜助清矩

THE VICTORIAN ERA IN JAPAN. IN 1872, WHEN THE PRESENT SENIOR BARON WAS STARTING FOR AMERICA, THIS "FINEST COMMERCIAL STRUCTURE IN TOKYO," CALLED THE MITSUI-GUMI HOUSE, AROSE TO HOUSE THE MITSUI BANKING ENTERPRISE

BURLINGAME PUBLIC LIBRARY

Council. He was one of four Japanese to be raised to the peerage on the occasion of the present Emperor Hirohito's enthronement—a pluperfect honor.

"Business is more than business!"

In chatting with American business men, Baron Dan is fond of observing with gentle reproof: "So, so, business is business, yes. But business is *more* than business! Business is human." This may be another way of saying that the gentle doctor, by his broadly human and considerate dealings with the 80,000 Mitsui employees, has kept them working at top speed for more than a generation, during which time there has been only one strike. That was in 1923, was provoked by political agitators, and was amicably settled in less than three weeks. Baron Dan believes in hiring old-fangled professional story-tellers, and new-fangled motion picture men, who visit the Mitsui plants in regular succession, giving free shows. Company schools and company stores are a matter of course, like company doctors and company three-roomed cottages. Stopping just short of old age pensions, the Mitsui pay a very liberal retirement allowance to employees who quit them after 25 years or more of service. It is characteristic of the mild and cultured "Morgan of Japan" that he encouraged his son, Mr. Ino Dan, to spend most of his youth and manhood studying art in Italy, France, and Spain, and finally to lecture on art in the University of Tokyo.

Exchange of 90 per cent

The Mitsui Bussan Kabushiki Kaisha (trading company or Mitsui & Co., Ltd.) is the Family's most extensive enterprise. As the heart of the Mitsui empire, and almost of Japanese commerce, it ceaselessly pumps oceans of exports, sucks seas of imports. Thoroughly international, even cosmic, it can best be described in terms of its products:

Silk, whether for sheer stockings, sun-kissed scanties or tawny brown telephone cords, now comes to the United States almost exclusively from Japan. In raw silk the two nations are amazingly interdependent. They reel 90 per cent of all we buy, and we take 90 per cent of all they sell. The Mitsui have long had a shrewd hand in this.

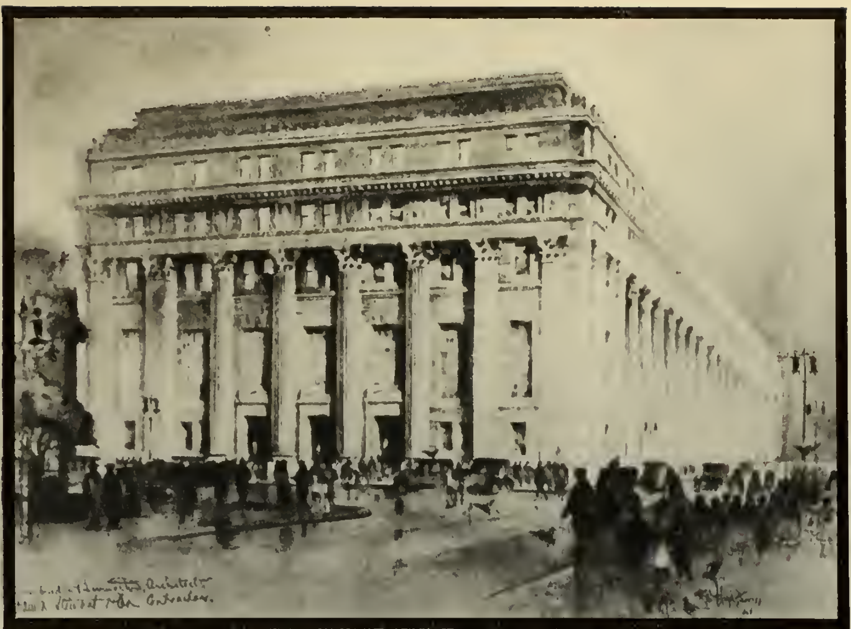
It is less than 30 years since Europe was the only dependable producer of high grade raw silk in quantity. Probably Italy still reels the best. In Japan, sericulture was and remains an enterprise of small farmers, almost of individuals. Such people cling to antiquated methods. To improve quality, Mitsui Bussan set up several model reeling plants. Crusty old silk farmers were bamboozled into the best ways of feeding, soaking, and unwinding their worms. Discreet agents were sent to Italy. They managed, despite exciting difficulties, to come away with thousands of selected Italian silkworm eggs. These the Mitsui Bussan hatched, then put the bull worms figuratively at stud for the benefit of Japanese sericulture generally.

Seventy times as great as tea

Today raw silk is Japan's greatest export, 70 times as great as tea. It constitutes two fifths of the outgoing commerce of Dai Nippon, and of this Mitsui Bussan handles a quarter. Every bale they touch is graded and conditioned by experts of their silk department, mostly in Yokohama, elaborately equipped with cohesion machines, seriplanes, and serigraphs for the handling of every kind of silk fiber and silk cloth. As traders whose sharpness kept them out of farming, the Mitsui are reaping fabulous private profits out of fabulous public service.

100,000 devils

Cotton is a second keen interest of Mitsui Bussan. This time the problem was the stimulation of an import item. Still another department —machinery—was created. As agents for the British textile machinery firm of Platt Brothers and Co., Ltd., Mitsui Bussan has imported a large proportion of all cotton spindles now twirling in Japan. The first began to spin in 1863. Recollect that prior to 1853 the very concept of machinery in the occidental sense was unknown to Japanese. In that year two steam frigates and two sloops of war, commanded by Commodore Matthew Calbraith Perry, punctured the isolation of what had been the "Hermit Empire." Terrified Tokyo heard that a hundred devil-possessed "Black Ships" were belching infernal smoke in the Bay of Uraga, preparing to land a hundred thousand devils. A Mitsui who was something of a dilettant cartoonist went down to see for himself. He brought back a sketch still extant. It suggests that devilish Commodore Perry had a horizontal nose some five inches long like Mr. Mutt's.



SURUGA-CHO, No. 1—NEW AND MODERN HEADQUARTERS OF ALL MITSUI ENTERPRISES

Some schoolbooks to the contrary, Commodore Perry did not open the Japanese trade door, but found it very slightly ajar and swung it wide. Through the chink and by especial favor of the Shoguns, the Mitsui had long carried on a considerable commerce with China and with the Dutch, who had a precarious concession in Nagasaki. The fact that the Mitsui were already internationally minded helped them to leap to the fore in the commercial new day of Japan. Cotton spinning and weaving was one of the first manufacturing industries introduced. There were other pioneers, but the Mitsui were first with a big branch office in Bombay, which is still their bustling headquarters for the buying of Indian cotton. Raw cotton is now the greatest Japanese import, and cotton cloth the No. 2 export, second only to raw silk. In 1921 the cotton department of Mitsui Bussan reached such an enormous volume that it was separately incorporated as the Toyo Menka Kaisha (Oriental Cotton Trading Co., Ltd.) with headquarters in Osaka, chief cotton port of the Empire.

Billions of beans

Coal and Oil, *Sugar*, *Cereals and Fertilizers*, and *Lumber* are four more departments of the all pervasive Mitsui Bussan. An almost superstitious belief that mining is a risky business kept the Mitsui out of coal while they meditated on its possibilities for perhaps a century and a half. With gingerly misgivings they bought the immensely profitable Miike coal mine in 1888; and in 1930 they still observe with particular scrupulousness the festivals of the God of Mines.

The coal department of Mitsui Bussan handles 40 per cent of the Empire's output and acts as selling agent for the gargantuan Mitsui Kozan Kabushiki Kaisha (Mitsui Mining Company, Ltd.) which annually digs five million grimy tons, or about one sixth of the national production.

Petroleum is handled as a simple import by the coal and oil department, but in the realm of vegetable oil the cereal and fertilizer department have a bounding babe of their own complex begetting. They shipped the first Manchurian soy beans to Europe in 1907. Today the beans, bean oil, and bean cake are international staples. Everyone who has sailed past Port Arthur and into Dairen has seen the batteries of Mitsui bean oil tanks bulking houses high. Sacks of beans piled twenty deep stretch away illimitably along the quays, crisscrossed by railways.

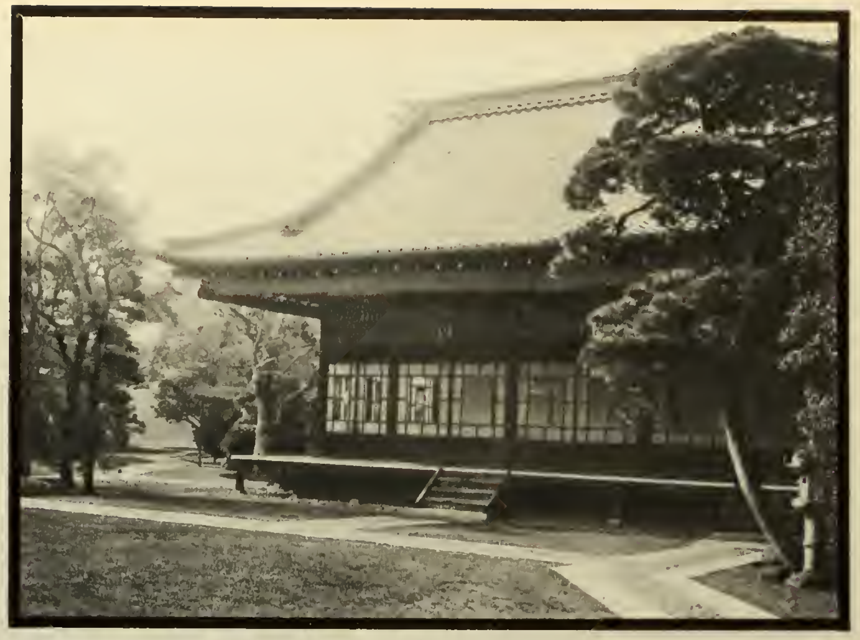
On the sweet side Mitsui Bussan are the largest dealers in Java sugar, and also buy in large quantities from Cuba. The lumber department has been selling American softwoods in Japan for a generation, and rather plume themselves on their recent coup of introducing and popularizing hard Japanese oak in Europe.

War has always proved a good tonic for Mitsui Bussan. After a long swig of the Russo-Japanese fight brew, the company not only quadrupled its business but became so sanguine of future profits as to increase its capital one hundredfold, from yen 200,000 to yen 20,000,000 ($10,000,000). Most of the Great War was fought upside down on the other side of the globe from Japan. But it once more quadrupled the business of Mitsui Bussan, and the capital was promptly quintupled to its present figure of yen 100,000,000 ($50,000,000). This brings us to the *Shipping and Shipbuilding Department.*

Submarines are good business

German submarines set the Mitsui to constructing ships. They have always owned many and chartered more; but in 1917 they let contracts for a shipyard at Tama, 64 miles west of Kobe, and in 1919 they began to build. To date they have launched 52 vessels aggregating 150,000 tons, mostly small but very profitable freighters. Their largest are the *Eastern Exporter* and the *Eastern Importer*, each of 15,000 tons.

THE GARDENS OF



ONLY THE AUGUST ENTER THE SENIOR BARON'S DRAWING ROOM

The Mitsui neither operate nor charter *de luxe* passenger ships—do not own the famous Nippon Yusen Kaisha (Japan Mail Steamship line). They built the first motor ship launched in Japan, and make both ship and stationary Diesel engines under Burmeister & Wain license. They own and operate 223,000 tons of the bottoms in which their trade is carried, but charter the prodigious excess of 3,000,000 tons, and are believed to control the rates which can be charged for chartered shipping in Dai Nippon.

Conscious that there can be only a few more departments left, the august guest of the Mitsui may be eager to press on into *Metals and Metal Goods*, *Machinery* and *General Merchandise*. But if so he is rash. Iron, steel, copper, tin, zinc, the famous Bunker Hill lead, rails, structural steel, sheet steel and galvanized iron will give him a headache sooner or later. If he is ndomitable, however, the machinery department will volunteer the claim that they were *first* to mport into Japan airplanes, motor cars, rotary newspaper presses, cotton spinning and weaving machinery, sugar mill tandems, railway equipment, and radio apparatus. Scarcely anyone n the general merchandise department can recite a hundredth part of the items in which it deals. But representative are flax, hemp, jute, wool and woolens, rubber and rubbers, pulp, paper, Portland cement, canned goods, salt, tea, tobacco, and matches.

Try and found a bank!

The joy and pride of the Mitsui themselves is heir Ginko or bank. As purveyors of money to uccessive Governments and to the Son of Heaven their position in Japanese politics is formidable in the extreme. They remember and glory in their banking struggles. To start a bank n the Japan of 250 years ago was infinitely more difficult than to obtain a British peerage today. Even money changing was a monopoly of powerful groups close to the Shogun or Tycoon (literally "High Prince"), who then ruled Dai Nippon as autocratic vice regent for the Emperor, totally eclipsing the divine progeny of the Sun Goddess.

The Mitsui think of this as their time of transition. They were just turning from the profession of arms to business, and had begun with a successful brewery at Matsuzaka, a small, remote town in the province of Ise. It is a great moment when Takatoshi Mitsui, later "The Great," sets out for the capital of the omnipotent Tycoon and rashly aspires to found a bank.

He begins with a dry goods store, because the money monopolists grudgingly allow stores in good standing to have a small exchange department. This will be the opening wedge. With consummate genius Takatoshi Mitsui sets himself to build the biggest store in Tokyo, with much the biggest exchange department. "He was generations if not centuries ahead of his time," says a Mitsui of today with reverence. "He established the first 'Fixed-price, Spot Cash, No Credit' store in Japan, and possibly in the world. He sold cloth in any length desired, whereas others would sell only 'kimono lengths,' enough to make a garment for a large person but too much for most people. He introduced the name of the store into popular novels and plays. When it rained, he loaned his patrons oiled paper umbrellas boldly inscribed with our trademark."

Traders know the mark wherever there is trade. It consists of three short parallel lines placed horizontally inside a square which is standing on one of its points. This is simply the Japanese ideogram for Mitsui, which means "Three Wells." Like the cherry tree story of George Washington is the pretty fable that more than a millennium ago the treasure of a robber band was discovered in three wells by a Japanese farmer who was known ever after as "Mitsui."

Pure gentleman, like pine tree

Ten long years pass before the dry goods store of Takatoshi the Great is of such prominence that he is allowed to make over its exchange department into the first Mitsui Exchange House. Soon he has others. Before Takatoshi dies in 1694 he is one of the 12 financial agents of the Shogunate, one of the dozen biggest bankers in Japan. He lives today, like George Washington, in little children's schoolbooks, along with his wife, Ju-san. An authentic painting of husband and wife is reproduced in such a way that boy scholars have in their books only the picture of Takatoshi and the ideograms at his side:

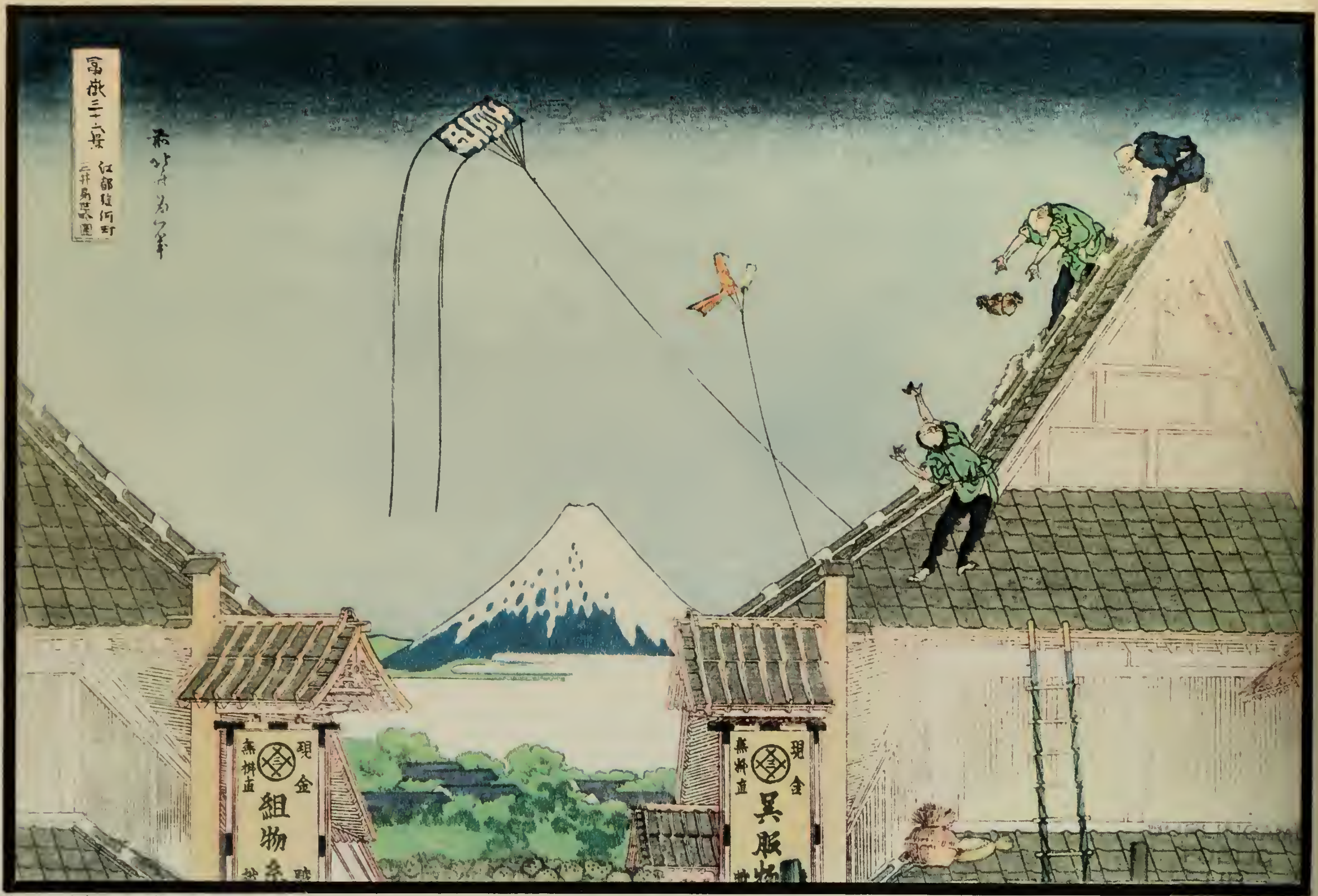
Deceased gentleman, pure and sincere like pine tree. His integrity will be admired forever. May his venerable spirit remain long with us.

Girl scholars have in their books only the gentle Ju-san and her ideograms:

Deceased lady, prosperous and glorious. Her virtues will be admired among our people forever.

The modern era of the Mitsui Bank is spanned by the lifetime of the present Senior Baron. The outstanding fact is that in 1867, when the Emperor Meiji emerged from the eclipse which had

THE SENIOR BARON



Courtesy of the Metropolitan Museum of Art

HOKUSAI (1760-1849) PAINTED THE MITSUI DRAPERY STORE WITH FUJI IN THE DISTANCE

darkened the Son of Heaven for 800 years and proceeded to resume his divine rule over Japan, the House of Mitsui instantly sided with the Imperial House, became their bankers, and played the leading financial rôle in suppressing the insurrections which followed the overthrow of the Shogunate and the ousting of the last Tycoon. In 1909 the Mitsui Bank was finally incorporated in its current form of a joint stock company, the Mitsui Ginko, with a present capitalization of yen 100,000,000 ($50,000,000). The most recent statement shows deposits of yen 644,421,820; loans and discounts yen 421,927,149; and profits for the half year ending June 30, 1929, yen 7,762,151.

How rich the Mitsui?

Several Japanese sources, all of which should be competent, estimate the aggregate wealth of the House of Mitsui all the way from half a billion to two billion yen—that is, from $250,000,000 to $1,000,000,000. In the most authoritative New York banking circles it is believed that the Family wealth does not exceed $500,000,000. The Senior Baron Mitsui paid income tax last year on $1,696,000. This was the second largest in Japan, the largest personal income tax being paid by Baron Iwasaki, retired head of the Mitsui's chief rival, the Mitsubishi interests. Baron Iwasaki's income was apparently $2,154,000. But the peculiar system under which the Mitsui Family Council takes a certain part of the profits of their companies and then doles it out to individual members "according to rank," as directed by the Family Constitution, makes income and profit statistics misleading.

The five richest families in Japan are generally taken to be Mitsui, Iwasaki (in business hours they call themselves Mitsubishi or "Three Diamonds"), Sumitomo, Yasuda, and Okura. Of these families only the Iwasaki rank with the Mitsui. They own the largest Japanese steamship line, the famous "N. Y. K." (Nippon Yusen Kaisha or Japan Mail Steamship line), and particularly excel at heavy manufacturing, in which they are associated with the Westinghouse Electric International Company of America. A rough but serviceable comparison of Mitsui v. Iwasaki may be had by considering capitalizations:

MITSUI

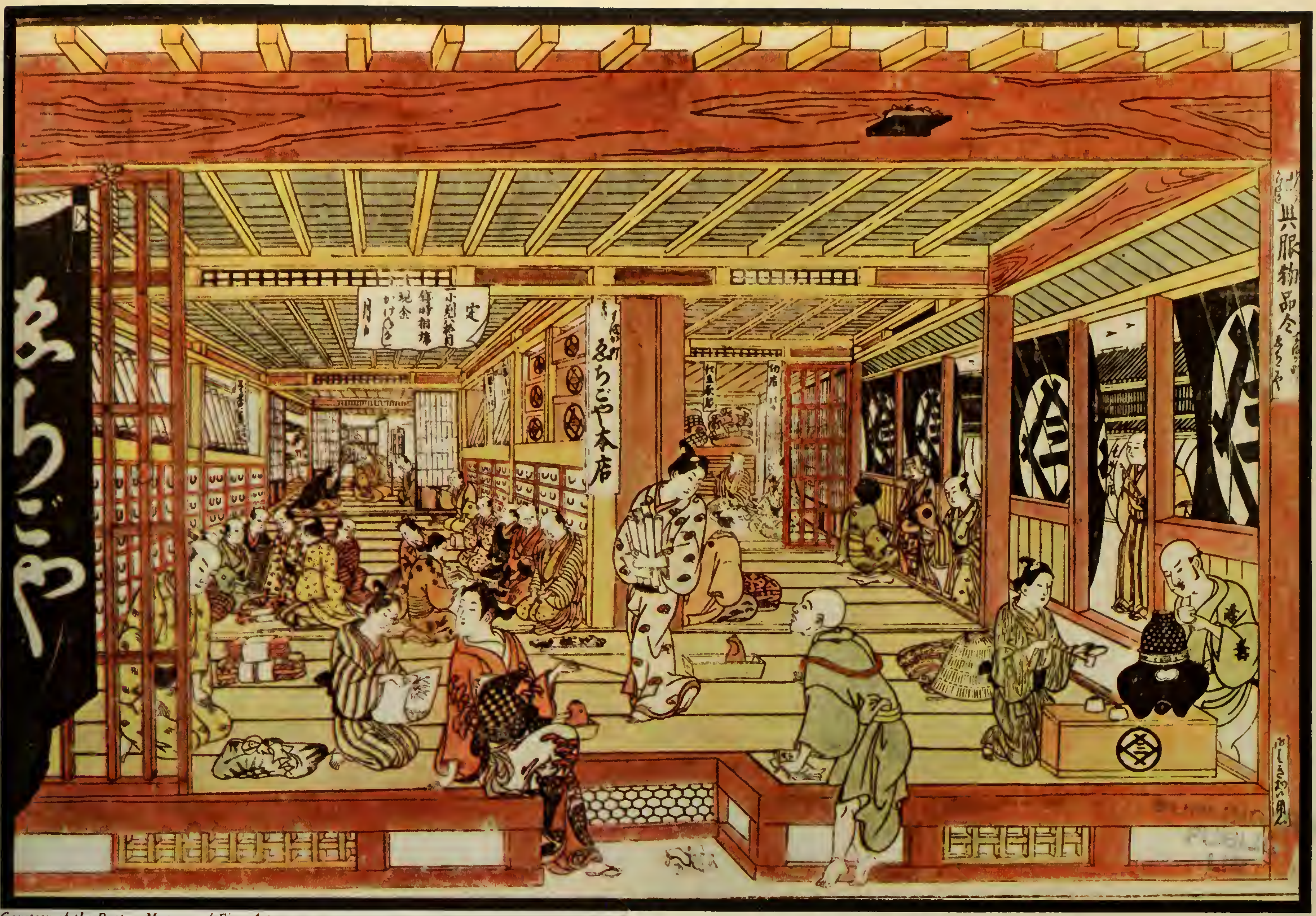
	Capital	*Paid up*
Holding Company	Yen 300,000,000	Yen Fully paid up
Bank	100,000,000	60,000,000
Trading Company	100,000,000	Fully paid up
Mining	100,000,000	62,500,000
Shipbuilding & Shipping	(Separate figures not available for these enterprises, departments under Gomei Kaisha.)	
Manufacturing		
Warehousing	Yen 15,000,000	Yen 11,500,000
Trust Company	30,000,000	7,500,000

IWASAKI or MITSUBISHI

	Capital	*Paid up*
Holding Company	Yen 120,000,000	Yen Fully paid up
Bank	100,000,000	62,500,000
Trading Company	15,000,000	Fully paid up
Mining	100,000,000	62,500,000
Shipbuilding & Shipping	50,000,000	30,000,000
Manufacturing	45,000,000	40,500,000
Warehousing	10,000,000	Fully paid up
Trust Company	30,000,000	7,500,000

Dai Nippon, great or poor?

These figures suggest that even the greatest Japanese enterprises, world-ramified though they may be, are not on a par of amassed gold value with the business empires of the West. When the Mitsui increased the capitalization of their trading company one hundredfold at a single bound, they had only $100,000 to start with and only $10,000,000 at the finish. All this is no diminutive of our premier assertion, that, in diversity and vastness, the Mitsui empire of business is without equal anywhere. One repeats that no other family has so long a reach or carries so much trade, but one adds that this is



Courtesy of the Boston Museum of Fine Arts

INTERIOR OF OLD MITSUI SHOP—BY OKUMURA MASANOBU

possible to Japanese on a gold outlay which seems disproportionately small by Western standards. A gentleman of Nippon with $1,000,000 in gold is in fact far richer than a mono-millionaire in New York. He can afford more servants, a finer town house, a much larger country estate, and, generally, a greater plenitude of all that appertains to wealth. Provide your Japanese workman with a few handfuls of rice a day, throw in two kimonos a year, and you have bestowed as much as though you furnished your American workman with his daily lamb chops and his annual Chevrolet.

Rate v. volume

Japan's astounding progress in all fields of commercial endeavor is astounding chiefly in relation to the incredibly backward age from which progress has been made in the 76 years since Commodore Perry flung wide the Empire's door. The *rate* of progress has been absolutely prodigious. The *volume* achieved is still sufficiently moderate to warrant the following flat statement: *There is no such thing as the Japanese Yellow Peril either in business or in sustained battle power, which nowadays is only in proportion to a nation's total economic strength.*

We have seen that Japan's greatest export industry is raw silk, scarcely an industrial product. Great though her strides in cotton spinning have been, she still has fewer spindles than North Carolina. Her pig iron output is less than half that of the minuscule independent Grand Duchy of Luxemburg. The iron ore *reserves* of Japan proper plus Korea are estimated at only 120,000,000 tons, or less than the *production* of the United States in 22 months. When it is considered that Japan is almost as poor in other minerals and coal as she is in iron ore, and that her prosperity really depends upon her exports of raw silk to the United States and cotton cloth to Asia, the position of Dai Nippon is seen to be far less formidable than that of any other Great Power. She can overcome her crippling scarcity of raw materials only by conquest, and yet she must keep on the friendly terms of a salesman with the very countries whose resources she covets most. Here is a vicious or perhaps a happy circle, which will not revolve.

Earharts or Edisons?

All else aside there are human and psychological factors which will long prevent Japanese from seriously threatening the industrial supremacy of the West. Miss Amelia Earhart has complained that in competition with male airplane pilots American women are enormously handicapped by the fact that their heredity and upbringing have been remote from mechanics. How much more remote than the American female is the Japanese male! Industrial Japan, like Miss Earhart, has soared to splendid achievements on hired wings and with a borrowed technique.

"It is no reflection upon the Japanese as a race to state that they are not good mechanics," observes Professor John E. Orchard of Columbia University. "In a little more than half a century they have been called upon to make a transition in mechanical knowledge and viewpoint that in England required several centuries . . . In over a hundred industrial establishments visited [by Professor Orchard in Japan] I failed to find a single important mechanical appliance of Japanese invention. There were Japanese machines, but upon close questioning I always discovered that the machine was a copy of one originating in England, the United States, Germany, or Sweden. I also discovered that the copies were almost without exception less efficient than the models from which they had been made. In Japan's leading industry, the reeling of raw silk, mechanical progress has been dependent upon the mechanical advances of the Italian industry."

Plastic Age

Outline of an industry which expects to rank with steel in two decades.

Reporter in wonderland

Months and months too soon, news leaked out about Zalmite, a substance named for Zalmon G. Simmons of Simmons Company. It became known that Simmons beds and Berkey & Gay (Simmons subsidiary) furniture would be made of it in 1930. If the curious wished to see Zalmite, they were referred to the Esmond Blanket Shop on Fifth Avenue, Manhattan. There a glittering bed, apparently of black Bakelite trimmed with nickel, designed by Norman Bel Geddes, could be seen. Besieged with questions, Zalmon Simmons gave few details and these facetiously. Of what was Zalmite actually made? "Peanut shells and burlap bags," said Zalmon Simmons. *Barron's* published the joke as fact. Scientists laughed at the credulous reporter.

The reporter should be excused. Combinations no less incongruous are a matter of course in the plastic industry. To explore the world of the plastics is like taking a stroll with Alice in Wonderland. The things of everyday life (cotton, paper, milk) keep turning up in the most unexpected forms.

Definition

Plastics are industrial materials of almost infinite possibilities. Formed by the combination of certain chemicals with each other and with organic materials, they are cast or molded into shape. More specifically, a plastic is a substance whose ingredients may include camphor, carbolic acid, soy beans, sour milk, cashew nut oil, oat hulls, ox blood, sawdust, cotton, or formaldehyde, and which is used to make fountain pens, movie films, buttons, rattles, table tops, lathes, automobile parts, beds, cigarette holders, insulators, and almost anything else.

The industry

Plastic prophets believe that their industry will be as important as steel in two decades. Already its products are indispensable to such major contrivances in this machine age as radios, airplanes, telephones, automobiles, and electric power lines. In 1914 a $14,000,000 industry, in 1928 a $219,000,000 industry is the record of plastic growth. Already the industry has its own magazine, *Plastics*, filled with pictures of strange machines and stranger products.

Divisions

Considered from the standpoint of ingredients and processes, the most important plastics fall into three groups: the pyroxylin plastics (as celluloid), the caseins (as Karolith), and the synthetic resins (as Bakelite).

Oldest plastic

Though it is a trade name registered by one company, celluloid has long been a household word for pyroxylin plastics. The 62-year-old pyroxylins, important as they are, have not the unexplored possibilities of the newer plastics. And their close relationship to gunpowder, of which the Cleveland hospital disaster was a gruesome witness, is a serious drawback.

Ingredients.—Theoretically, any plant fiber (cornstalks, wood, cotton, etc.) with cellular structure for the base; in practice, cotton is used. To this cotton, treated with nitric acid and sulphuric acid, camphor is added, under heat and pressure.

History.—Blending camphor and nitrocellulose (guncotton), John Wesley Hyatt in 1868 produced a substance which his erudite brother called "celluloid." Billiard balls and dental plates were the humble uses to which the Hyatts first put their new material. After celluloid had become established, John W. Hyatt retired from the company to develop new inventions, among them his famous roller bearings. But his company went on to become the important Celluloid Corporation, recently taken over by the Celanese Corporation of America.

Virtues.—Pyroxylin's three outstanding qualities are thermoplasticity (can be molded under heat), transparency, and great elasticity.

Products.—Most important is camera film ($43,000,000 out of an annual $60,000,000). Also used in toilet articles, nonshatterable glass, rattles, trinkets, and (in rural districts) collars.

Makers.—The Eastman Kodak Company (film); the Celluloid Corporation (its other important plastic, Lumarith, is less inflammable, more expensive than pyroxylins); Fiberloid Corporation; du Pont Viscoloid Company.

Sour milk plastic

This is the most frivolous of the plastics. Of it are made many small articles, colorfully streaked and mottled, but no camera film and no machine gears. If Architect Buckminster Fuller of Chicago builds his house of casein plastic, as he would like to, the results might be inconvenient. If he dropped a match on the floor, the charred plastic would smell like a blacksmith shop. And if it rained, his house would grow flabby, wobble, and gently collapse. Far better might casein plastic keep to buttons, while Architect Fuller use synthetic resin.

Ingredients.—The action of formaldehyde on casein forms this plastic. Casein is a protein substance derived mostly from sour milk, but in Japan from the soy bean. Most of it is imported (90 per cent from the Argentine), and 75 per cent of it is used in the paper industry, either for wall paper or for coated book papers. Its next greatest use is for plastics. Miscellaneous uses of casein include glue, varnishes, massage creams, and shoe polish.

History.—About 1890 a German chemist, Adolf Spitteler, was asked to devise a white blackboard. Working with casein and formaldehyde, he achieved something much more important: a tough, hornlike substance, which his firm promptly patented. Up to 1914 the resulting Internationale Galalith (Greek for "milkstone") Gesellschaft Hoff was the only maker of casein plastics in the world. The War broke up the monopoly.

Virtues.—Noninflammable, transparent (if desired), not brittle, can be molded by heating, not affected by oils, can be etched by acids.

Products.—Chiefly buttons, umbrella handles, toilet sets, chessmen, fountain pens, picture frames, cigarette holders, and other small articles.

Makers.—The Aladdinite Company (President P. C. Christensen, former Edison assistant, who devised the first American process in 1919), the Karolith Corporation (affiliated with Bakelite Corporation), Erinoid Company of America (affiliated with Borden Company).

Most plastic plastic

The synthetic resins (Bakelite, Durez) are the plastics of the future. Their greater adaptability has already given them a wider range of uses than the caseins or the pyroxylins. Their remarkable strength and toughness make them beyond all question the plastics most vital to industry.

Ingredients.—Basically, a combination of carbolic acid and formaldehyde.

History.—An eminent American chemist, Dr. Leo H. Baekeland, in 1909 solved a problem that had baffled scientists for 35 years: he produced a synthetic resin that was fusible and soluble, and could therefore compete with natural resins and shellacs. But, en route, he discovered, at first to his consternation, a resin that at a certain temperature became infusible, tough, and intractable; that resisted acids; and that stood up under 100,000 volts of electricity. It was when he learned to control this remarkable substance that he began to understand what a find he had made. The Bakelite Corporation, founded on Dr. Baekeland's process, was first in the synthetic resin field and is still the largest by a great deal.

Virtues.—The most irrevocably hard and amazingly protean of all plastics.

Products.—These vary according to the manufacturing process used. The most obvious, and the least important, are pipestems and cigarette

[*Continued on page 118*]

Bullfighting, Sport and Industry

Marcial Lalanda made over $150,000 last year. But the bull breeding sons of Don Eduardo Miura took in only $33,000. Then there is the matter of the *propina.*

(This article, dealing with the economics of the bullfight business in Spain, is contributed to FORTUNE *by Mr. Ernest Hemingway.)*

FORMAL bullfighting is an art, a tragedy, and a business. To what extent it is an art depends on the bulls and the men who are hired to kill them, but it is always a tragedy and it is always a business. Just how much of a business it is may be judged from statistics which showed that the Spanish people spent 20,000,000 pesetas[1] ($2,966,000) on bullfights in 1911. Maximiliano Clavo who, writing under the name of Corinto y Oro, is one of the most prominent bullfight critics in Spain—his position on *La Voz* of Madrid corresponds to that of W. O. McGeehan on the New York *Herald Tribune*—disputed this sum at the time and gave figures to show that the Spanish public spent between 28,000,000 and 35,000,000 pesetas ($4,152,400 to $5,190,500) a year on bullfights. Since then the price of seats at the bull rings has doubled and in this last year there were 319 formal *corridas de toros* or major league bullfights in Spain as against 241 in 1915.

Every once in so often you read in the papers a stock story about how Association Football is putting bullfighting out of business in Spain. It is a story that is usually written by a newspaper man on his first visit to Spain, a visit which may be made during the off season for bullfights when football is in full swing. With rare exceptions the major bullfighting season opens at Easter and closes at the end of October. May is the fatal month for the bullfighters. Joselito, Granero, Varelito, all died in that month as well as many matadors of earlier days. May is the most dangerous month because bulls are at their strongest after fresh spring pasture and before the long, hot, debilitating voyages from ranch to bull ring in summer months. Bullfighters in May are not yet at the peak of their training after a winter's inactivity or else stale from the long trip to Mexico or South America.

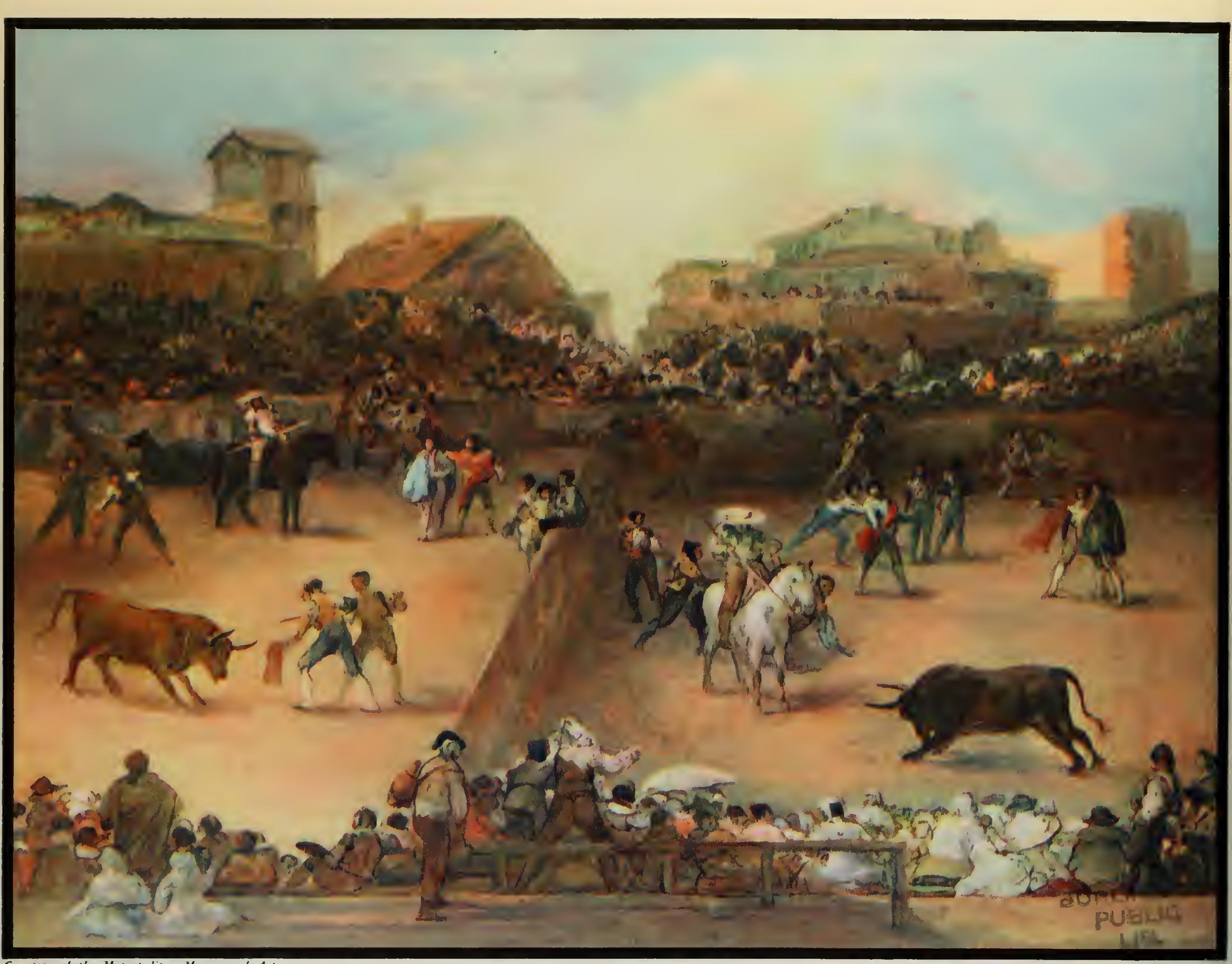
After October many of the bullfighters go to Mexico, Peru or Venezuela where the season opens as it closes in Spain; others go to the bull breeding ranches of Salamanca to train during the winter with the young bulls and cows, and others spend the winter resting or recuperating. A visitor to Spain sees no bullfighting activity in the late fall, winter or early spring unless he goes out into the country; but to conclude that the bullfighting industry is dying out is as silly as it would be for a European visitor to deduce that baseball was finished because of the empty ball parks in America after the World Series.

There were 230 major bullfights in Spain in 1922. This was the lowest figure in a number of years and was caused by the death in the bull ring, in two successive years, of Joselito—one of the three or four greatest bullfighters who ever lived—and Manuel Granero, a boy from Valencia who gave promise of taking the great Joselito's place. After Joselito, whose real name was Jose Gomez y Ortega, nicknamed Joselito or Gallito, and the last of a great family of bullfighters of that name, was killed in the ring at Talavera de la Reina[2] many people who had admired him swore they would never go to bullfights again. His great rival, Juan Belmonte, retired and when young Granero was killed in Madrid in May, 1921, the public was left without an idol. In 1924 various young matadors were getting a following and there were 248 big league *corridas.* This number was increased to 286 in 1927, in 1928 to 305, and last year to 319.

In this last year 61 bullfighters killed 1,856 bulls in Spanish rings. The bulls were paid for at an average price of around 1,800 pesetas (from $240 to $300 apiece) and were furnished by 104 different accredited bull breeding ranches. That means that the accredited ranches (they are organized into an association for mutual protection and to protect the breed, fighting bulls being bred as carefully as race horses) received something over 3,340,800 pesetas ($495,440.64) for formal or classic fights. In addition they furnished about one third as many defective animals at bargain prices for the apprentice bullfights or *novilladas.* There are also informal bullfights for amateurs, called *capeas,* where any sort of bulls are used, but these come under the head of sport and are not considered here except as they serve as training schools for professionals.

Fighting bulls

The Spanish fighting bull is as different from any domestic bull as the wolf is from the dog. He is not merely a vicious form of the same animal, he is a separate and wild strain directly descended from the wild bulls that roamed the Iberian peninsula, and he is closer kin to the Cape buffalo, supposedly the most deadly of African big game, than to the Hereford, Jersey or Durham. The bulls are raised on big ranches where they live as they did in the days when they were a free roaming wild animal. When they are a year old, the calves are cut out of the herd by men on horseback and branded with the iron of the breeder and with an individual number. They are given names in the breeder's stud book. About the same intelligence is exercised in naming them as is shown in the naming of race horses and Pullman cars. When they are two years old, the calves are tested for bravery. Both the male and the female calves are tested, and the testing may be done either in a corral or on the open range. This test, in which they are allowed to charge a man on horseback and are held off by a *pic* or *vara,* a long lance like a vaulting pole with a short steel pike at the tip, is to determine their bravery and a note is made of their probable courage or viciousness.[3] Those that are not brave are marked for veal. The cows are tested to find their suitability for breeding to maintain the viciousness in the strain. They are tested also as to their following the cape, in order to avoid breeding from color-blind animals or animals indifferent to color. A color-blind bull or one with defective vision is useless for the ritual of the bullfight. Great care is taken that the bull calves should not come in contact with the men on foot, and the bullfighters and amateurs



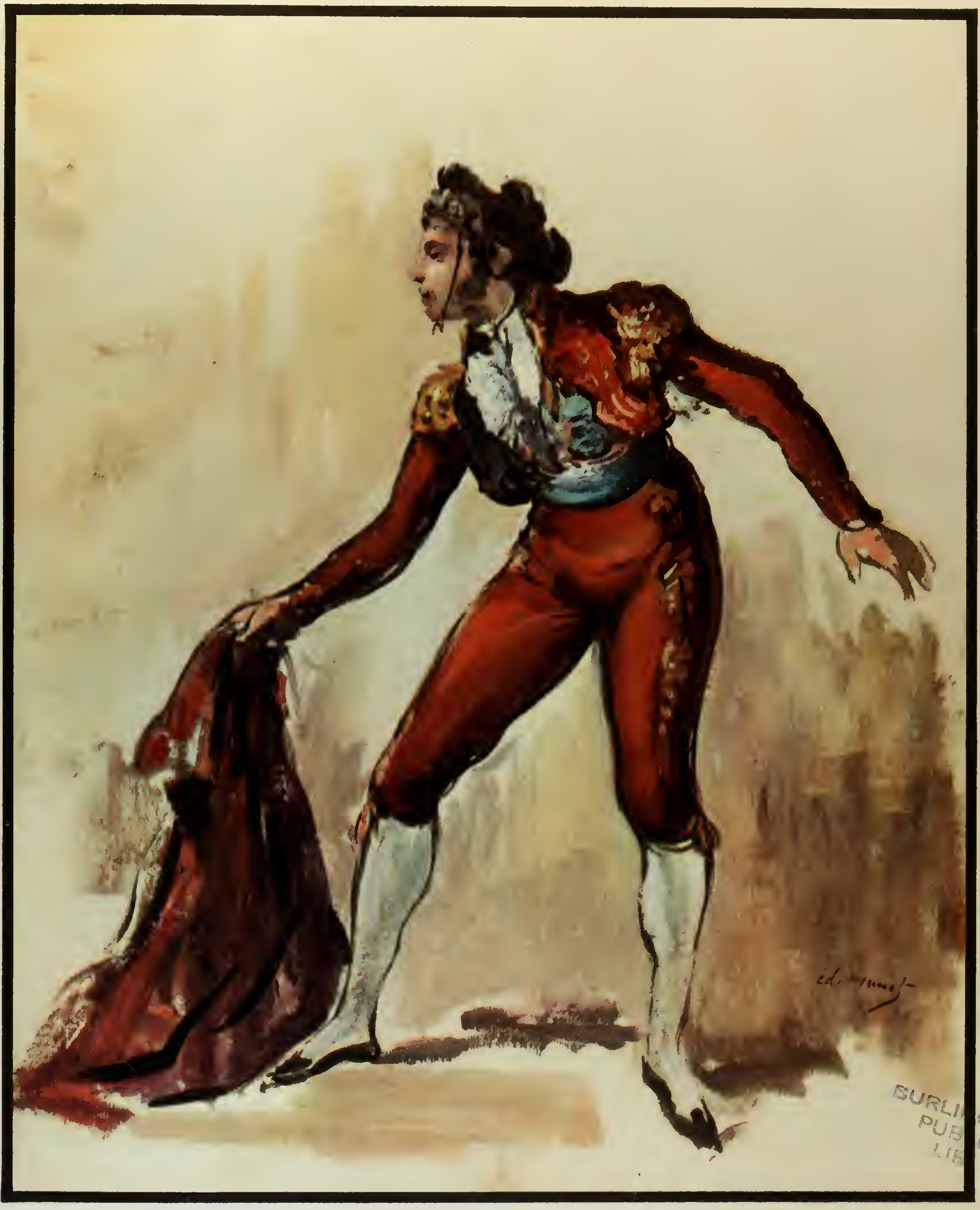
Courtesy of the Metropolitan Museum of Art

BULLFIGHT—BY FRANCISCO JOSE GOYA y LUCIENTES

who come to the tests are only allowed to practice their cape work with the female calves. This is because there is no harm in the cows learning about the cape and how to hunt for the man; in fact it is necessary to test them if they are to be bred, but the whole ritual of bullfighting is built on the fact that it is assumed that the bull is having his first contact with a dismounted man in the ring.

The bull is only in the ring about twenty minutes from the time he comes out until he is killed, but all the time he is learning and becoming increasingly dangerous. The bullfighter, from the time he comes out with the red cloth and sword, is given fifteen minutes to kill the bull. If the bull is still on his feet at the end of ten minutes, the matador is given a warning through a bugle call ordered by the presiding official at the fight. A second warning is given three minutes later and a final warning at the end of the fifteen minutes. When the bugle blows for the third time the matador must leave the bull and retire behind the barrier in disgrace. The bull is taken out to the corrals by the steers which are held in readiness to enter the ring the minute the final warning sounds. A bull taken out in this way must, by law, be killed at once in the corral. The disgraced matador may be fined a part or the whole of his contract at the discretion of the presiding authority. If his attitude has been insolent or cowardly, he may be ordered to jail on a charge of disrespect of the constituted authority and by his attitude causing scandal and riot. This scandal and riot caused by a bullfighter who is afraid to kill the bull is something worth seeing for anyone interested in scandals and riots as such. In the early times of bullfighting bulls were allowed to fight several times in the ring and so many men were killed in bullfights that the church forbade anyone taking part in them under pain of excommunication, and this ban was only lifted when a law was passed which required that every bull which appeared in the ring, whether he was killed by the bullfighter himself or not, should be killed at the end of the fight. It is around this law that the modern tragedy of the bullfight is built.

The bull moves quietly in the herd. Separated from the herd he is not so peaceful. As to his strength: I have many times seen a bull lift a horse high in the air and with a thrust of his neck muscles throw the horse over onto his back. Picadors, riding the horses, are many times thrown completely over the barrier by the shock of the bull's charge. The most common end for a picador is mental derangement from the



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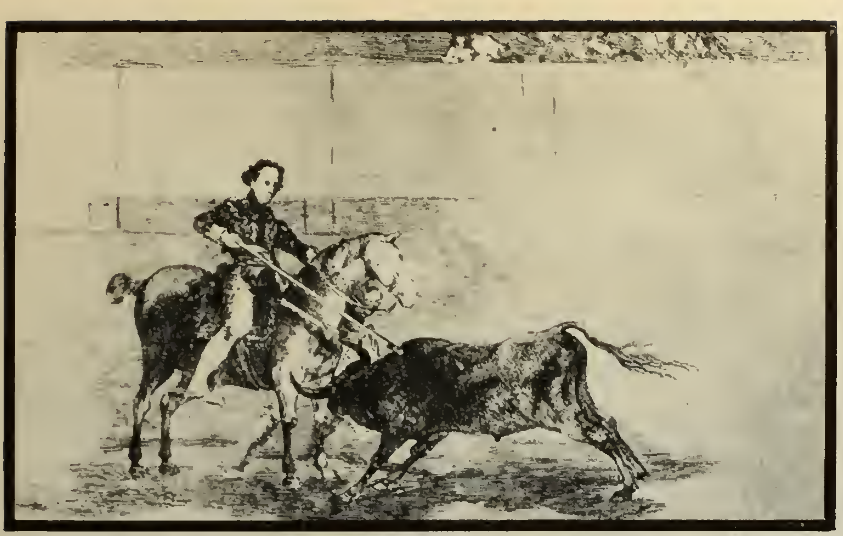
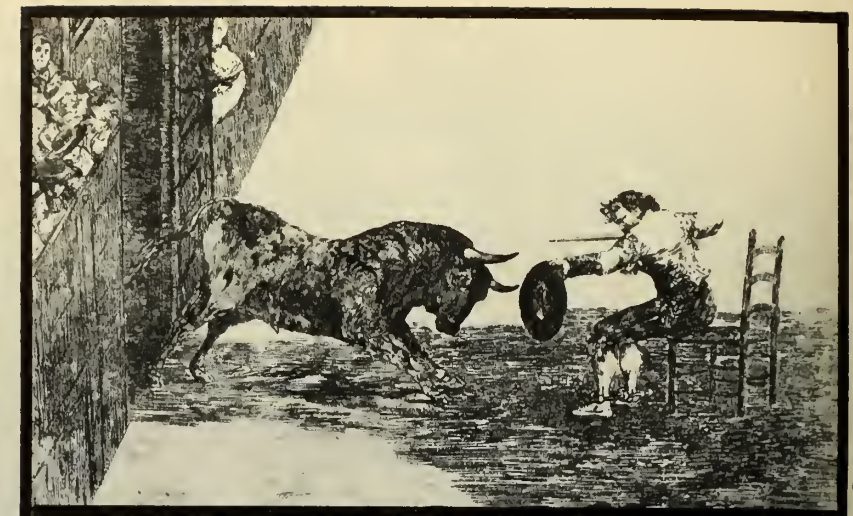
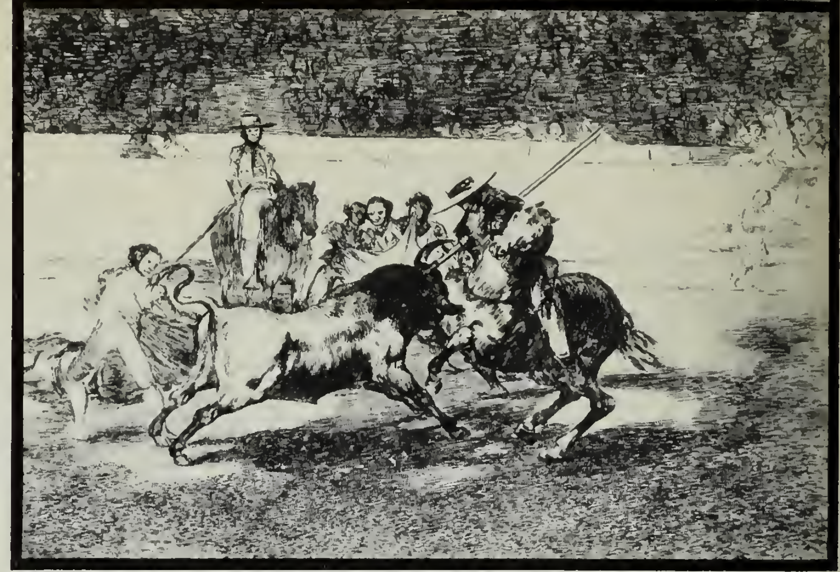
THE TOREADOR
BY EDOUARD MANET

[From the private collection of Josef Stransky]





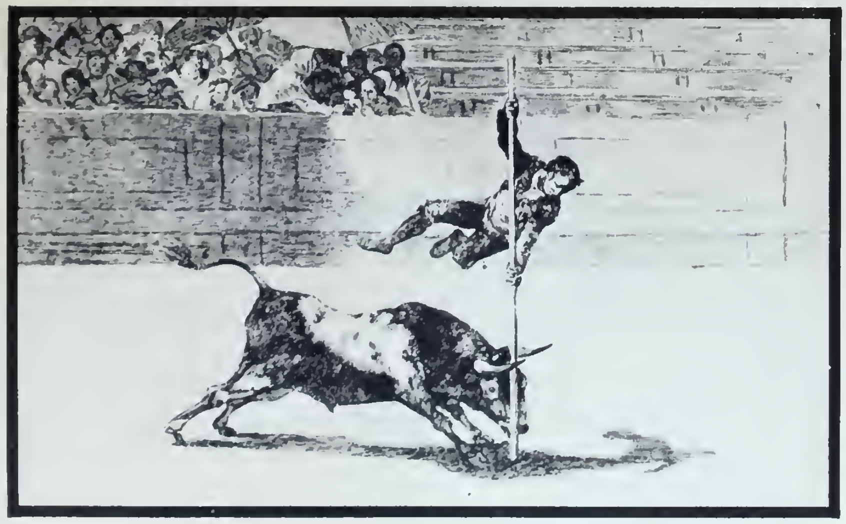


Courtesy of the Metropolitan Museum of Art
A GROUP OF TEN ETCHINGS BY GOYA

concussion of the shocks he receives when he is thrown with his horse by the bull.

As to blind bravery: a single really brave bull separated from the herd, will attack, light-heartedly, a motor car (this has occurred many times), an elephant (this took place in the ring at Madrid and the bull would have killed the elephant had the fight not been stopped), and with no hesitation at all a full-grown African lion. This fight was allowed to go to a finish and the bull killed the lion. We do not know how representative a champion the lion was. The point is that the bull showed no fear of him and the more threatening noises the lion made the more eager the bull was to charge.

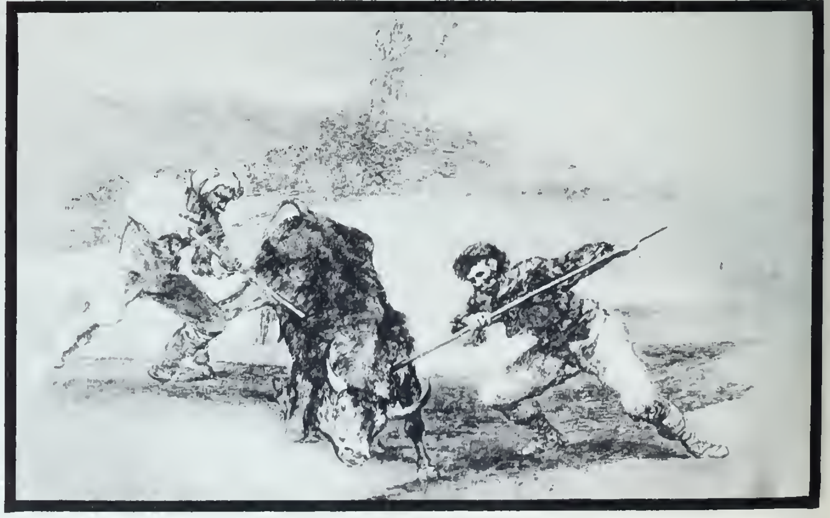
He is vicious, angry; the great hump of muscle on his neck that gives him power when he hooks rises; his horns are sharp, sometimes as sharp as a porcupine's quill, if he has not blunted them or splintered them against the inside of his traveling cage; and he is as fast on his legs and turns as quickly as a polo pony. There are six bulls to a fight, and they are sold on the hoof at the ranch for between 12,000 and 15,000 pesetas ($1,779.60 to $2,224.50) for the six. The purchaser pays for the cost of putting the bulls in the cages. By the contract he is required to pay for any damage they may do while they are being driven from the ranch to the pens where they are caged. It is he who loses if the bulls fight among themselves and any are wounded or killed. He is required to pay the railway fare from the ranch to the bull ring of a man who travels with the bulls to see they are given food and water, and he guarantees to pay this man a tip of 100 pesetas ($14.83) after the fight and his fare back to the ranch. If from the time the purchaser, who is the bull ring promoter, sees and pays for the bulls on the open range any of them are hurt, die or become sick with an infectious disease, it is the purchaser's hard luck. He also guarantees by contract that the bulls will be unloaded from their cages and rested in the corrals of the bull ring for a full three days before they are to be fought.

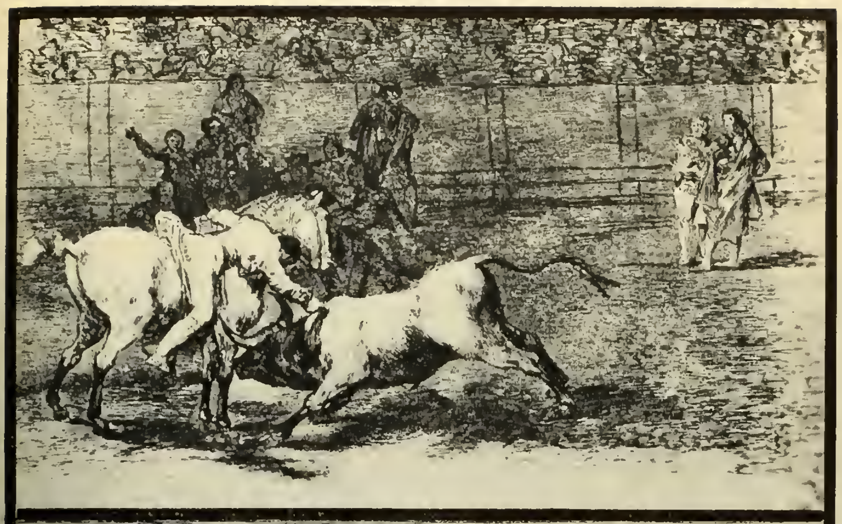


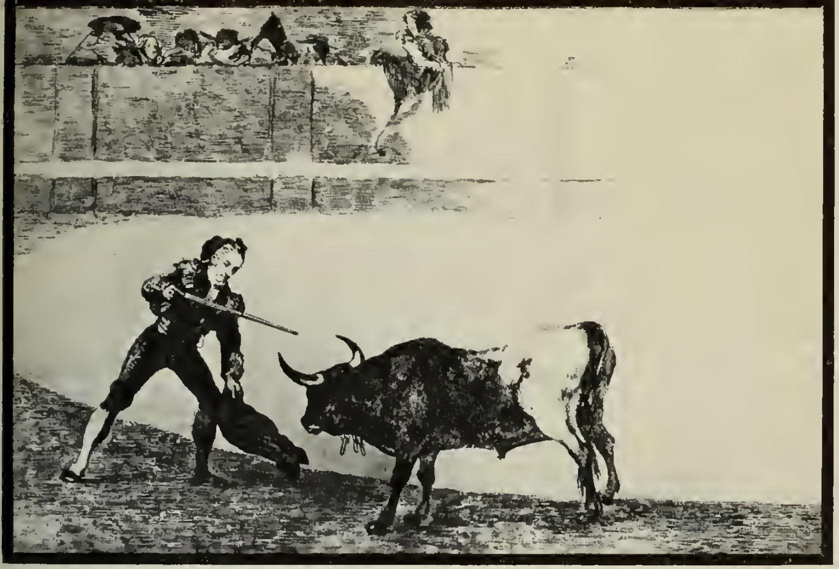
There is no truth in the story that the bulls are kept without food or water to make them more vicious. The bull is not a carnivorous animal; he does not kill for hunger but for pleasure and bulls are given food and water until they are put into separate dark pens at noon on the day of the fight.

Breeders of bulls

The sons of Don Eduardo Miura of Seville own perhaps

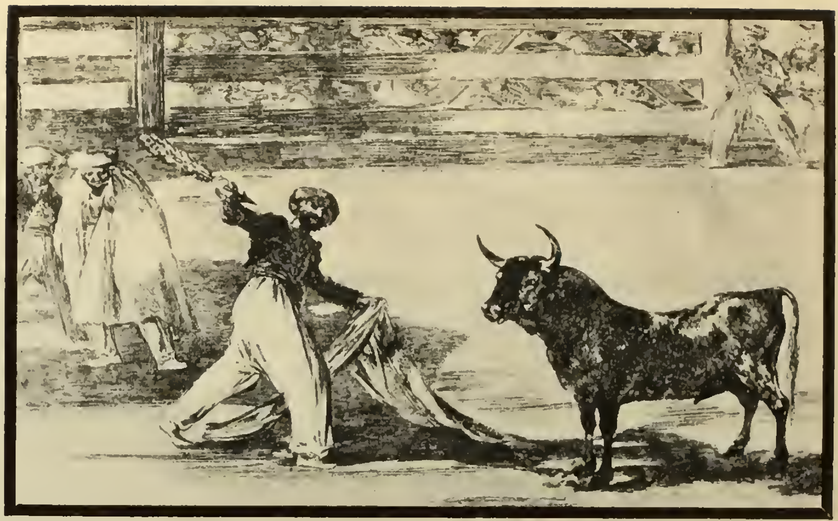






FROM THE COLLECTION, *LA TAUROMAQUIA*

the most famous bull breeding establishment because their bulls have killed more men that any other. This is not because they are particularly brave but because they are very uncertain, reserved, refusing to charge uselessly and frankly, but saving their strength to try and kill the man. They are also big, stand high at the shoulder, have very wide horns and necks that seem to reach longer and longer as the fight goes on. The bravest bulls are usually black, but the Miura bulls are roan, sorrel, steel grey, black and white and various combinations of colors. This last year, in spite of the fact that many of the bullfighters do all they can to avoid having to fight the Miuras, the ranch sold 66 bulls for formal fights.[4] It probably sold nearly half as many defective bulls, that is



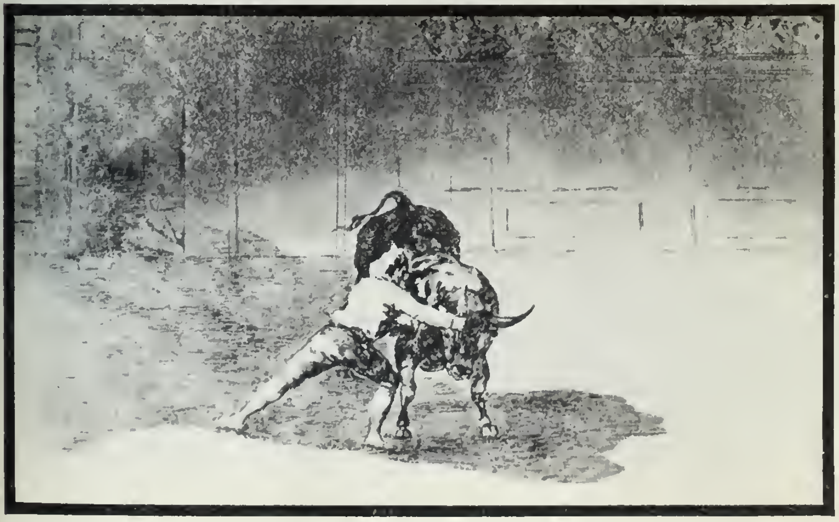
with some defect of horn or vision, for the minor fights which are called *novilladas.* A *novillo* may mean either a bull which is under four years of age or a fully aged bull with some defect that makes him unsaleable for formal fights or *corridas de toros* where the bulls are required by law to be between four and five years old and free from all defects.

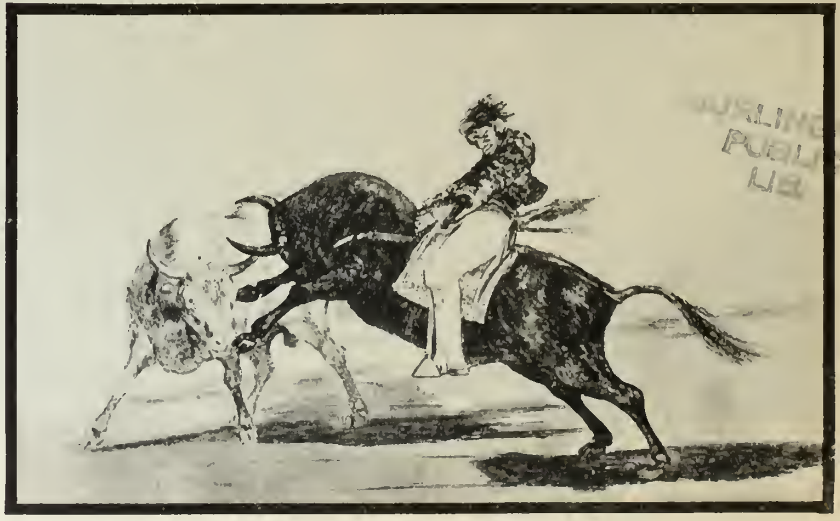
At 3,000 pesetas apiece the Miura bulls brought their owners 198,000 pesetas for stock sold for formal fights. If 20 young or defective bulls were sold (they sold 18 in 1928 and the 1929 figure will not vary greatly) at 1,200 pesetas apiece, that adds another 24,000 pesetas. This total of 222,000 pesetas or around $33,000 is the gross income and from that must be deducted all the expenses of the ranch.

Pablo Romero is another famous bull breeding ranch, perhaps the most scrupulous of all in testing, breeding only from the bravest stock, never selling any bulls under age and never seeking to reduce the size of the bulls through breeding down to please the bullfighters. Last year they sold 60 bulls and their gross income from these and the defective bulls will probably not have been above $33,000.

Of all those concerned in bullfighting, it is the conscientious bull raisers who have made the least out of the general advance in prices. In 1865 a first class lot of six bulls brought 6,000 pesetas. In 1885 the price had gone up to 9,000. In 1912, when a bullfighter was making 7,000 pesetas as top price for killing two bulls, a lot of six bulls from the ranches sold for about 12,000 pesetas. Now, when first class bullfighters get 15,000 pesetas for an afternoon's work and Juan Belmonte, who was in a class by himself before he retired, received 25,000 pesetas for a fight, the same lot of six bulls brings only 15,000 pesetas.

The result has been that many bull breeders are unwilling





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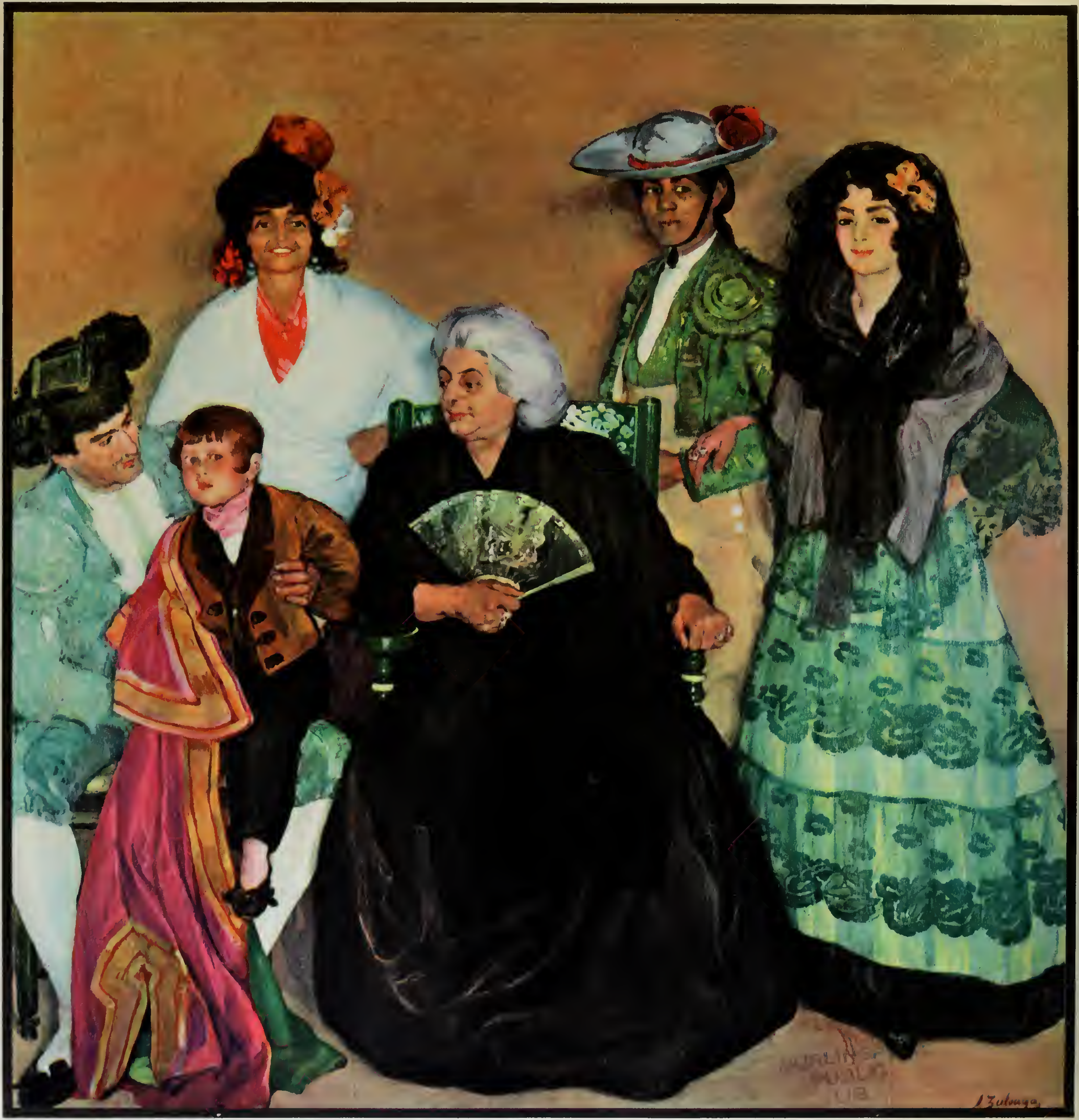
to keep their stock until they are past four years, and, to please the bullfighters, who sometimes insist on certain breeds of bulls in their contracts, sell their products when they are only just past three years, and are therefore much less experienced in the use of their horns, lighter and less dangerous, the breeders relying on the compliance of the medical authorities to pass them as fully aged.

There is a royal decree which regulates all phases of bullfighting: the weight of the bulls, that is, the dressed weight the four quarters must have when the bull is cut up in the butcher shop of the ring after the fight to be sold; the age (this is judged by the teeth which must be examined on the severed heads by a government veterinary after the fight and a written report made); the height of the horses which are ridden by the picadors in the first third of the fight and bear

[*Continued on page 139*]

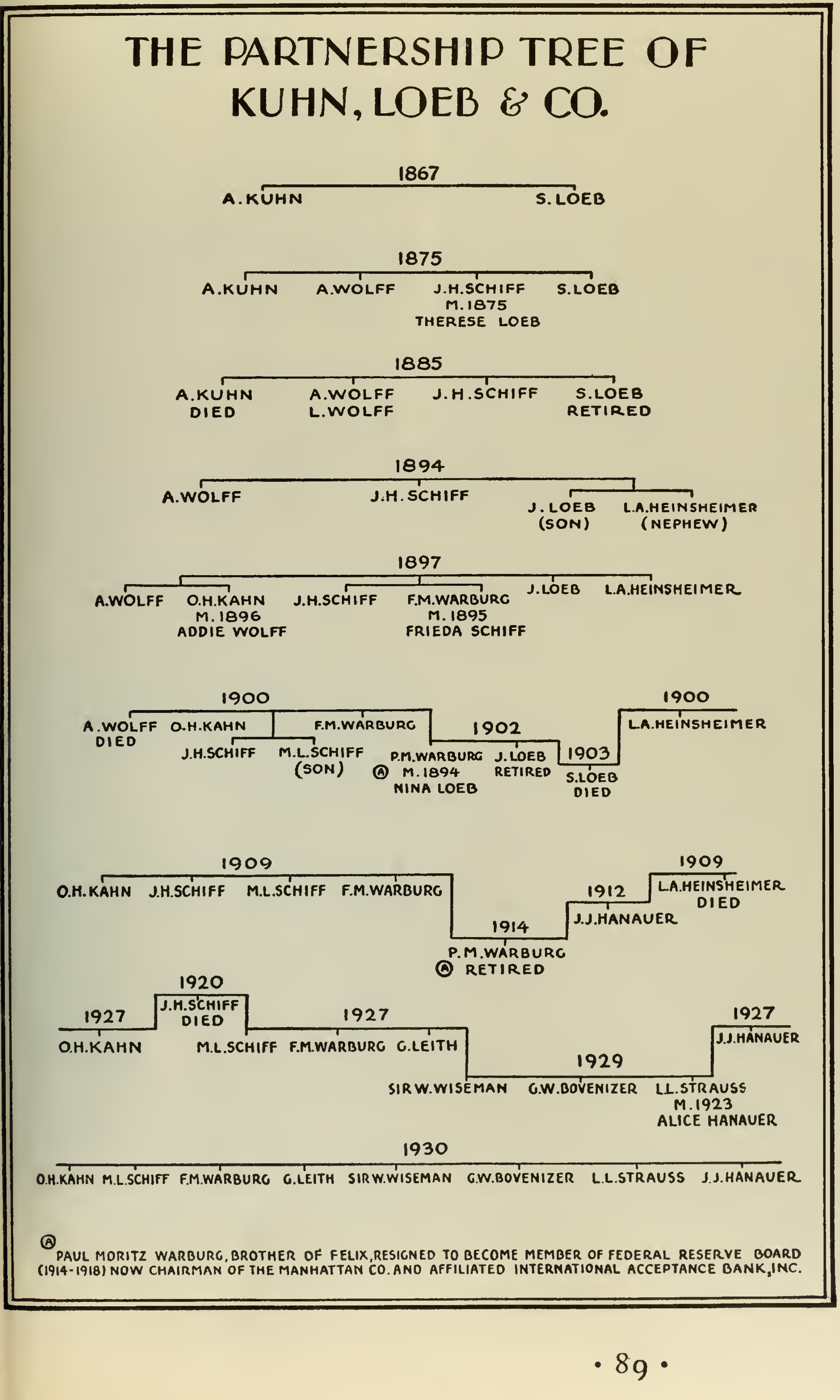


Courtesy of the Hispanic Society of America

THE FAMILY OF THE GIPSY BULLFIGHTER—BY IGNACIO ZULOAGA

Mr. Kuhn and Mr. Loeb

Intended to retire, but founded a banking house instead. To industry, chiefly railroads, their descendants and successors have supplied $12,000,000,000 of credit.


THE PARTNERSHIP TREE OF KUHN, LOEB & CO.

1867
A. KUHN
S. LOEB
1875
A. KUHN
A. WOLFF
J. H. SCHIFF M. 1875 THERESE LOEB
S. LOEB
1885
A. KUHN DIED
A. WOLFF
L. WOLFF
J. H. SCHIFF
S. LOEB RETIRED
1894
A. WOLFF
J. H. SCHIFF
J. LOEB (SON)
L. A. HEINSHEIMER (NEPHEW)
1897
A. WOLFF
O. H. KAHN M. 1896 ADDIE WOLFF
J. H. SCHIFF
F. M. WARBURG M. 1895 FRIEDA SCHIFF
J. LOEB
L. A. HEINSHEIMER
1900
A. WOLFF DIED
O. H. KAHN
F. M. WARBURG
J. H. SCHIFF
M. L. SCHIFF (SON)
1902
P. M. WARBURG Ⓐ M. 1894 NINA LOEB
J. LOEB RETIRED
1903
S. LOEB DIED
1900
L. A. HEINSHEIMER
1909
O. H. KAHN
J. H. SCHIFF
M. L. SCHIFF
F. M. WARBURG
1914
P. M. WARBURG Ⓐ RETIRED
1912
J. J. HANAUER
1909
L. A. HEINSHEIMER DIED
1920
J. H. SCHIFF DIED
1927
O. H. KAHN
1927
M. L. SCHIFF
F. M. WARBURG
G. LEITH
1929
SIR W. WISEMAN
G. W. BOVENIZER
L. L. STRAUSS M. 1923 ALICE HANAUER
1927
J. J. HANAUER
1930
O. H. KAHN
M. L. SCHIFF
F. M. WARBURG
G. LEITH
SIR W. WISEMAN
G. W. BOVENIZER
L. L. STRAUSS
J. J. HANAUER

Ⓐ PAUL MORITZ WARBURG, BROTHER OF FELIX, RESIGNED TO BECOME MEMBER OF FEDERAL RESERVE BOARD (1914-1918) NOW CHAIRMAN OF THE MANHATTAN CO. AND AFFILIATED INTERNATIONAL ACCEPTANCE BANK, INC.

IN ALTERNATE periods of expansion and retrenchment since 1875, American railroads have drawn heavily on Kuhn, Loeb & Co. for capital funds and reorganization counsel. A tranquil but vital railroad center is this private banking house at William and Pine streets, Manhattan. Singly or in syndicate, it has offered nearly $12,000,000,000 of securities, principally those of carrier companies. Much more than a billion dollars of this credit was absorbed by one system alone, the prosperous Pennsylvania. By contrast, the nation's most extensive railway salvage project stands also to Kuhn, Loeb's credit. This achievement was the reorganization in 1926 of the now swiftly convalescing Chicago, Milwaukee, St. Paul & Pacific—a reorganization involving $750,000,000 in securities and 11,000 miles of trackage. It was also through a reorganization of the Union Pacific in 1897 that Kuhn, Loeb became universally recognized as greatest rail financier. A more recent (April 26, 1928) high moment in Kayell history came when in the Kuhn, Loeb offices $63,000,000 was paid by the Pennsylvania to purchase Leonor F. Loree's interest in the Lehigh Valley and the Wabash.

Long and impressive is the list of companies whose securities Kuhn, Loeb & Co. sponsor (see following page) and in whose affairs the bankers maintain a "continuing interest." Many of these affiliations have endured for from twenty-five to forty years, some—such as the Pennsylvania, the Chicago & North Western, and the Chicago, Milwaukee, St. Paul & Pacific—for half a century.

Yet, although Kayell is a house preëminent in railroad financing, it has not limited itself to carrier securities. In the communication field, it has floated issues for Western Union Telegraph Company and (in conjunction with the House of Morgan) for American Telephone & Telegraph Company. The Youngstown Sheet & Tube Company, the United Steel Works, and the Inland Steel Company have called upon it. Its nonrailroad transportation clients include North German Lloyd and Brooklyn-Manhattan Transit Corporation. The Westinghouse Electric & Manufacturing Company and the United States Leather Company were reorganized under its direction. Foreign government (Argentina, Austria, Chile, Cuba, Czechoslovakia, Germany, Japan, the Netherlands, Sweden) and municipal (Antwerp, Bordeaux, Lyons, Marseilles, Oslo, Paris, Prague, Tokyo, Yokohama) bonds have been included in its issues. It was Kayell which introduced Royal Dutch Co. shares to the New York Stock Exchange and Pennsylvania securities to the Paris Bourse.

When, on February 1, 1927, Kuhn, Loeb celebrated its sixtieth birthday with an issue of $95,000,000 Missouri Pacific bonds, its total passed the ten billion mark. Since that time it has done an additional $1,600,000,000 of financing (largest recent issue: $140,000,000 in Pennroad common). Therefore some $11,600,000,000 has gone into American and foreign industry via the House of Kuhn, Loeb. Last August, when the late Bull Market was at its crest, Kuhn, Loeb purchased, without subsequent reoffering, $52,000,000 of New York City notes, and thus indicated its distrust of top-heavy stock prices. Later, when the Market crashed and so many spectacular banking laurels were suddenly withered, Kayell aided the famous banking consortium in its stabilizing work.

* * *

The affairs of Kuhn, Loeb are managed by eight partners, theoretically equal, with interchangeable duties and correlative powers. No partner is a specialist in any one banking field; all matters are decided by the partners in conference assembled. In the absence of a lawyer-partner, Kuhn, Loeb has for many years depended for legal advice upon Paul Drennan Cravath and his associates.

THE MAJOR KUHN, LOEB COMPANIES

RAILROADS

r	Baltimore & Ohio
	Central of Georgia
m	Chesapeake & Ohio
r	Chicago & Eastern Illinois
r	Chicago, Milwaukee, St. Paul & Pacific
	Chicago & North Western
r	Denver & Rio Grande Western
	Delaware & Hudson
	Gulf, Mobile & Northern (G.W.B.[1])
r	Hudson & Manhattan (J.J.H.)
	Illinois Central
	International Great Northern
	Kansas City Southern
r	Missouri Pacific
	Missouri-Kansas-Texas
	New Orleans, Texas & Mexico
	Norfolk & Western
	Pennsylvania
	St. Louis Southwestern
	Southern Pacific
r	Texas & Pacific
r	Union Pacific
r	Wabash
	Western Maryland
	Paris-Lyon-Méditerranée
m	National Rwys. of Mexico (J.J.H. & W.W.)

INDUSTRIALS

	Western Union Telegraph Co. (M.L.S.)
r	Westinghouse Elec. & Mfg. Co. (J.J.H.)
m	American Tel. & Tel. Co.
	Inland Steel Co.
	Youngstown Sheet & Tube Co.
r	United States Leather Co. (L.L.S.)
	Pennroad Corp.
	Paramount Famous Lasky Corp. (W.W.&G.W.K.[2])
	Brooklyn-Manhattan Transit Corporation
	United States Rubber Co. (L.L.S.&W.W.)
	Consolidation Coal Co.
	Chicago Pneumatic Tool Co. (L.L.S.)
	Mid-Continent Petroleum Corp. (J.J.H.)
	United Steel Works (Arbed)
	North German Lloyd

BANKING

	Equitable Trust Co. (O.H.K.)
	Chemical Bank & Trust Co. (M.L.S.
	The Manhattan Co. (F.M.W.)

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r Companies reorganized with Kuhn, Loeb assistance.

m Jointly with J. P. Morgan & Co. as bankers.

[1] Initials of Kuhn, Loeb partners on board.

[2] Gilbert Wolff Kahn, no partner but son of partner.

The last senior partner of Kuhn, Loeb was the late Jacob Henry Schiff, who died in 1920. His son, Mortimer Leo Schiff, though on an equal plane with other Kayell partners, is perhaps most directly the successor to previous Kuhn, Loeb generations. Mortimer Schiff was raised in the expectation of becoming a Kuhn, Loeb partner, just as Mortimer's son, John, is following the same *cursus honorum* and is at present a member of the Kayell organization. And certainly Mortimer Schiff has been the able son of an able father. Leaving Amherst during his sophomore year (he objected to being conspicuous as a rich man's son), he then worked for James J. Hill, studied railroads under this most expert teacher. In 1900, at the age of twenty-two, he became a Kuhn, Loeb partner and worked constantly with his father, who gradually turned over to him greater and greater responsibilities. In 1914 the two Schiff generations were contemporaries on the Western Union directorate; in 1917 they alternated on a Liberty Loan Committee. By 1920, when the elder Schiff died, the dynasty had been firmly established.

The present head of the Schiff house is a fluent writer and talker, is given to holding *post mortems* on hands of bridge and poker. His home is at 932 Fifth Avenue, Manhattan, where he has a collection of Persian bowls and pottery, of early Italian majolica, and the set of preliminary and completed sketches by old masters which Joseph Green Cogswell collected from 1786 to 1871 and which Mr. Schiff purchased about 1915. The Manhattan cellar is also rich with rare old wines. Mr. Schiff has a summer home at Oyster Bay, a Spanish villa at South Ocean Boulevard, Palm Beach, and foreign quarters in Paris.

Best known of Kuhn, Loeb partners is undoubtedly Otto Hermann Kahn, most perfect example of the modern patron of arts. During previous periods in the world's history, and in countries other than America, the artist has been subsidized chiefly by members of the nobility. In this country, where knighthood was never in flower and where a man's income, rather than his title, is the measure of his influence, it is the industrialist by whom the Muses must often be supported. And generous have been our modern Lorenzos. Usually, however, they tend to institutionalize their gifts—to endow a chair or a library or a college, and, their checks having been written, to concern themselves personally no more. They have, so to speak, the good works, but not the faith.

Acme

IN POINT OF RANK, KUHN, LOEB & CO. HAS NO SENIOR PARTNER. BUT IN POINT OF PRESTIGE, THE FIRM'S MOST NOTED BANKERS ARE MR. MORTIMER L. SCHIFF . . .

But no such vicarious benefactor is Mr. Kahn. His enjoyment of the opera is as keen as his support of the Metropolitan is essential. He brought the Diaghilev Russian Ballet to America, but he would have seen and enjoyed it even if he had had no connection with its coming and even, no doubt, if the price of a ticket had been with him a major consideration. Stanislavsky's Art Theatre, Copeau's Théâtre du Vieu Colombier, the Max Reinhardt Company, the Provincetown Theatre, the Civic Repertory, the Theatre Guild—nearly every *succès d'estime* (and many of the failures) have applied, not vainly, for Mr. Kahn's assistance. Nor does Mr. Kahn support solely esoteric enterprises. The story is told that after producers of the supercinema *Wings* had spent a million dollars and were about to abandon the picture, Mr. Kahn supplied the additional half million which saw the project through. And in every theatre, commercial as well as artistic, the Kahn waxed mustache, the Kahn *boutonnière*, the Kahn impeccability is a familiar sight. Kahn is a man with a relish for living (important is the thickness of his toast, keen his enjoyment of jam), one of the fortunate rich whose money has enlarged his capacity for enjoyment without limiting the things he finds

[*Continued on page 116*]

Photograph by Tony von Horn

. . . AND THAT NOTABLE PATRON OF THE ARTS, MR. OTTO HERMANN KAHN

. . . and Apple Pie

The production of our time's staple.

ON a buttress of white tile stands a battery of nickeled cylinders with neat glass gauges where the coffee bobs. Above, a steel rack spiders down the wall. On the rack are rows of circles like a frieze of coins. Each coin is approximately ten inches across, two inches through, beveled on the under edge, brown as an antiqued painting. Each weighs a rough three pounds. A knife will cut it. Three divisions will reduce it to six approximate triangles. Each triangle will emit a faint warm smell of cinnamon and nutmeg. Subdivided with a four-pronged fork, and tasted, the mouth remembers apples. Cheese consorts with it. Coffee leaves it sweet.

On Lexington Avenue the rack is tended by a grim young man with a small, black, bright old eye and a starchy garment like a hussar's blouse. In Laredo the blouse is an apron, the eye is Yankee, and a fan with tissue paper foliage blows the flies away. In Northampton the apron is a clean white dress and the words are bitterly intelligible. In Cody the middle-aged man in the middle-aging shirt sleeves swallows and does not respond. On La Salle Street the asides are Neapolitan. In St. Louis not.

The happy statistician

But the full moon faces on the polished rods remain. They do not alter. They are still ten inches, more or less, across, still taste of apple, still cut thrice in six. The same words, hours, associations, even the same price, produce them still. Brakemen accustomed to consume them in Minneapolis order them in Piggott, Arkansas. And taste no change. Sad automobilists buy them from town to town the way a man buys postage. Or Ford cars. Sure of the product in advance. Millions are eaten. More than seventy-seven millions in a year. Nearly a thousand acres of brown pie. Some ten thousand miles of pie on racks. Tons on tons. There is no need for testimonials: "The Duchess of X—— eats apple pie." Chicago endorses pies with $35,000,000 each year; of this, three fourths is spent by housewives, eaten in the home. One Chicago bakery turns out 90,000 pies nightly. The Census Bureau picks a figure—$59,811,168—this means pies produced annually by bakers alone. Of all desserts eaten, perhaps two thirds are pies. Of all pies, two fifths are apple. The statistician smiles with pleasure; he deals with exact units. No need for weighted charts, adjusted curves. This Laredo pie is the statistical brother of that Philadelphia pie. They can be added into bigger and better statistics, divided into *pro ratas*. Why should they alter? From the polished shelf Atlantic City looks like Galesburg. And pie's pie.

Photographs by Arthur Gerlach

A SMALL, INTELLIGENT MECHANISM, LIKE A CLEVERER APE, PEELS APPLES

And pie is our time's staple. Let him who questions it recall to mind the apple-pie-hung billboards of the country roads, the apple pies that glaze the street cars, the loud printed yelps of pie. There are none. No man sells them. Anonymously as the rains from heaven they fall and are devoured. Bread has become a thousand things but bread— "Dainty-maid," "Tasty." Hams are "Premium," "Smokehouse," "Acorn," "Star." Flour has its more usual synonyms. But pie stays pie. And the five hundred million perpendicular or horizontal or oblique forks that slice its corners are content to take it so. As pie. Sometimes as apple pie. And add the cheese.

The obliging machine

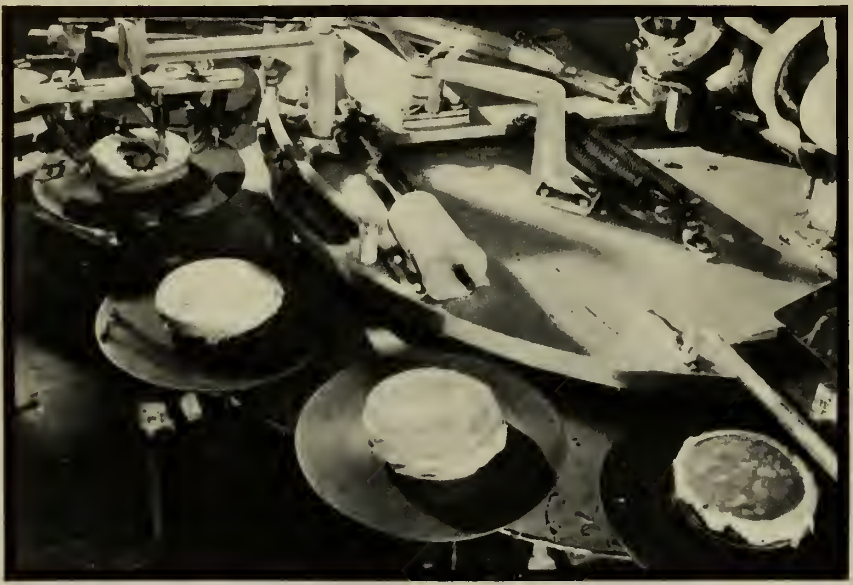
It would be agreeable to believe that the whole thing were miraculous, that pies scaled down out of heaven in some remote South Bend at six precisely, a tastier manna for a no-less chosen race. Unhappily it is not so. Anonymous and secret though it be, there is an Industry of Pie. Between the precarious forkfuls on the well-aimed forks and the just ripe Winesaps on the Virginian trees, there stand invested dollars. Men do work. Machines with jerkily revolving metal platforms sprout up pale mushrooms of rich dough, two inches to the jerk, behead them, bunt them off, each lump a pie crust, accurate to the ounce. A boy like a machine, the movement of his head against the movement of his hands in one-four time, his left leg solid, takes the dough lump, knuckles it in flour, flips it to a tin. Eight times in twenty seconds. A small intelligent mechanism like a cleverer ape peels apples. Ladles of syrupy fruit sauce spill above the open dish. The air warms with cinnamon. The doughy veil draws over. Mechanical hands trim, shove, load, twist. An endless chain runs to a revolving table. The revolving table spins to a moving floor. The floor marches through a fifty-foot-long oven. The gas flames sizzle. The pies turn golden, bubble up, take shape. Far down the blistering corridor a narrow slot of daylight grows and grows. A man leans forward, peering at the dark, shoots a long paddle sidewise, catches three disks together on the clever blade, swings to the pie tray, dips them, slides them off. The trays go down the inclines to the street. The yellow trucks receive them, grind away. A warm new smell of pastry rises with the coffee fumes. The cafeterias refill.

HUGE COOKING VATS TURN OUT STANDARDIZED FLAVOR

Twenty-five million dollars' worth of apple pies per year is Industry. Two and a half million bushels of apples, eight thousand tons of shortening, sixteen thousand tons of flour, twenty thousand tons of sugar, seventy-eight tons of cinnamon and nutmeg: all these are Industry. Add the incalculable pyramids of homemade pies (much more than the baker's total) and the gastric imagination gives under it like an over-loaded floor. Spread the business out with its eastern gateway on the Grand Banks, its northern limit along the limits of civilization, its southern edge following the curve of beaten biscuit, its western at Los Angeles, and you have a Stone of Empire. And then remark that the entire Industry is anonymous and that no man, till you scale the summits of the dollar pie and eat the fluffy offerings of the Seven Baker Brothers, knows or cares who makes the wedge he chews on, and you have before you a Phenomenon of a hitherto undiscovered order. You have a major industry completely overshadowed by its product. In this age.

BOTTOM CRUSTS IN PROCESSION

The truth is that the pie is mightier than its stove. And not because its history rises to the remote and succulent antecedents of four and twenty blackbirds. Not at all because New England made it and Ford has eaten it. Not remotely because the addition of ice cream to the crust, like the addition of speech to the moving pictures, saved its face. Pie is what it is in our cafeteriated time—first, because it is good; and, second, because it, chiefly of the traditional dishes, has accepted the machine. As its shape suggests. Bread doughs must rise vegetably in a tepid room. Fruits and cooked fish take to cans (a mere dodge and imitation of machine-made goods, for in the shiny can is nature still: the lump-side pear, the various sardine). Pie alone is what it is.



MECHANICAL HANDS MAKE THE PIE READY FOR THE BAKING

Build an enormous central bakery in Kansas City, ship its output to the coasts, and all pie-eating humanity will consume the same sound pie, which, if less tempting than the best of human cookery, will be always severely better than the worst.

The wise archæologists

Archæologists have a way of guessing at civilizations by the look of their kitchen middens—their horse bones, clam shells, mollusks, fish, baboons. Potatoes were a corner in history. Ice was a full stop.

When New York goes down, the rusty crusts of tin, the tin stains on the rocks, the one, preserved, half-fossil, quart bean can will bear some speculation. But the etymologist who first retrieves from the root of some harsh outland noun the name of Pie and slowly, out of many usages, depicts it as it was, will more nearly reconstruct our era than any digger of the mouldy mains.

"It would appear," he notes, "that men in those centuries were rationed by the machines with a kind of circular biscuit filled with a jelly (chemical traces of which have been discovered forty feet below the present level of the lake at the ancient site of Ch'kawgo) made from a remote ancestor of our melapple.

"This they ate in structures dedicated to the purpose, the ruins of which, as exposed by Dlf and Bzgm, show a rudimentary ingenuity in the machines which constructed them . . . "

A MARCHING FLOOR OF APPLE PIES ENTERING THE IMMENSE GAS OVEN

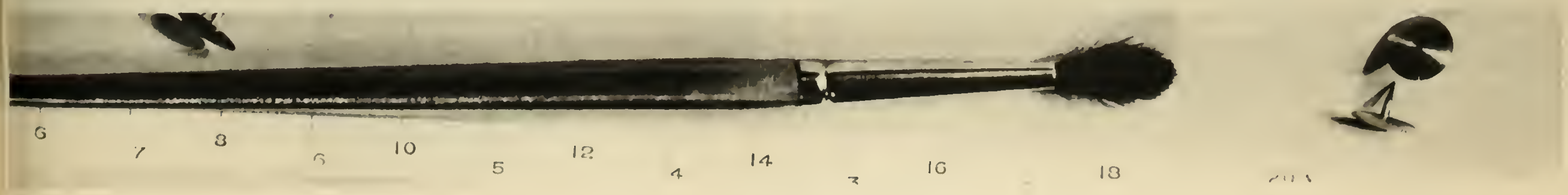
NO longer can an advertiser depend upon the brute power of money and "dominating" sizes of space to gain or hold supremacy.

WHAT every advertiser faces today is increasingly a competition of the gray matter that is put into his white space, against that which is put into his competitors'.

LESS and less is the act of advertising enough for success. More and more is the art of advertising a deciding factor in leadership.

YOUNG AND RUBICAM · INCORPORATED · ADVERTISING
NEW YORK · PHILADELPHIA

SERVING the following clients: The Black Flag Company, The Borden Company, Edward G. Budd Manufacturing Co. and Budd Wheel Company, Columbia Phonograph Company, Inc., Devoe & Raynolds Co., Inc., Fels & Co., General Foods Corporation, International Silver Company, Johnson and Johnson, The Norwich Pharmacal Company, Pennsylvania Grade Crude Oil Association, Quaker State Oil Refining Co., Reo Motor Car Company, Rolls-Royce of America, Inc., A. G. Spalding & Bros.



Transactions

Condensations and analyses beneath the headlines of the business news.

GOODRICH TO ABSORB MILLER RUBBER CO.

Who.—The B. F. Goodrich Co., makers of tires (Silvertown Cord) and 32,000 other rubber products.

What.—Offered 113,504 shares of Goodrich common for the Miller Rubber Company, an Akron, Ohio, neighbor.

Why.—Miller discontinued its dividends on common shares in January, 1928, passed its quarterly dividend on the preferred on June 1, 1928, reported at the end of the year a deficit of $3,434,900, owing to tremendous inventory losses. Miller had one of the ten largest tire companies in the U. S. with large distributing facilities. Goodrich ranked fourth. The merged company will be second only to Goodyear in all the world.

2 RAYON UNITS TO BE MERGED

Who.—Directors of American Chatillon Corporation and the Tubize Artificial Silk Company of America.

What.—Agreed to combine to form Tubize Chatillon Corporation, capitalized at $23,200,000, reaching third rank among U. S. rayon producers with an annual production of 17,000,000 pounds. Of the four methods of making rayon, Tubize Chatillon will use three. Tubize, alone in the United States, now uses the oldest and most expensive—the nitrocellulose method. Cotton linters is treated with nitric and sulphuric acid to make highly explosive guncotton. Chemically washed to become less inflammable, the spinning solution is made into thread. Very costly, this process accounts for but 9 per cent of U. S. production, but makes a thread of superior quality and strength. American Chatillon uses both the viscose and the cellulose acetate methods. By the viscose process, 84 per cent of United States rayon is made (Viscose Corp., du Pont rayon, American Chatillon). The raw materials are relatively inexpensive: wood pulp, caustic soda, carbon bisulphide. The cellulose acetate method (5 per cent) uses cotton linters or wood pulp treated with acetic acid and anhydride. The resulting substance has the disadvantage of being very difficult to dye. The fourth process, exclusively used by American Bemberg Corp. (2 per cent), treats cotton linters with ammoniacal copper oxide.

UNDERWEAR MERGER OF LARGE CALIBER

Who.—B.V.D. Co., Inc., New York; Atlas Underwear Co., Piqua, Ohio; Regatta Manufacturing Co., Baltimore.

What.—Though individually numbered among the largest manufacturers and distributors of underwear in the United States, these three concerns have joined forces in the new B.V.D., Inc. Each will continue under its former management; all will be supplied with yarns and piece goods from the B.V.D. weaving mills and finishing plants.

Why.—To create for the first time a raw-material-to-finished-product manufactory, producing all types of men's high quality underwear.

FORM BIG COMPANY TO USE CORNSTALKS

Who.—Herbert F. Perkins (president, International Harvester Company), Charles D. Wiman (president, Deere & Co.), Joseph E. Otis (chairman of board, Central Trust Co., Chicago), Frank O. Lowden, Bernard Mannes Baruch, and fourteen other bankers, lawyers, and farm industrialists.

What.—Met in Chicago to organize National Cornstalk Processes, Inc., a $1,000,000 closed corporation for the manufacture of synthetic lumber from cornstalks. Leasing patents or processes developed by Dr. O. R. Sweeney at Iowa State College, National Cornstalks will establish a chain of mills throughout the Corn Belt.

Why.—To provide a market, at $3.00 or more per ton, for the 150,000,000 tons of cornstalks produced annually in this country, to furnish a substitute for wood pulp in industry, and to start turning out at once cheap and strong synthetic lumber. The reclamation of cornstalk waste owes much to President Hoover, who, while Secretary of Commerce, insisted that the Federal Bureau of Standards send men and funds to aid the work at Iowa State.

Peanut Growers Form Marketing Body at Moultrie

Who.—Peanut growers of south Georgia.

What.—Subscribed to a fund to draw up constitution, by-laws, and marketing plans for a peanut growers' coöperative association.

Why.—U. S. Senator Walter F. George believes "the Federal Farm Board can be of substantial assistance to the peanut growers . . . that the price of peanuts [about $8.50 a bag of 95 pounds] can be more directly affected through the assistance of this board than the price of any other staple farm product grown in our state."

Form Nitrate Combine

Who.—Directors of the Chilean Nitrate Producers' Association.

What.—Decided to form a sales and distribution organization which will control the entire Chilean nitrate output (3,500,000 metric tons a year), and a sales commission with headquarters in London to take care of the European market.

Why.—To eliminate brokers' commissions, stabilize price levels.

INGRAIN HOSIERY LEADERS TO MERGE

Who.—Leo Propper, president of the Propper Silk Hosiery Mills, Inc.

What.—Acquired from George B. ("You Just Know She Wears Them") McCallum, president of the McCallum Hosiery Co., the assets and business of the latter organization. The McCallum company began operating the second full-fashioned hosiery mill in the United States in 1892. The Propper company was founded eight years ago. McCallum mills are located in Northampton, Florence, Holyoke, Mass., and Philadelphia; Propper mills in Long Island City and Elmhurst, L. I.

PAINT COMPANIES LINKED TOGETHER IN NEW MERGER

Who.—George A. Martin, president of the Sherwin-Williams Co. (1929 total sales, $75,778,071), and Ernest T. Trigg, president and general manager of John Lucas & Co., Inc. (1929 total sales, about $6,000,000).

What.—Completed negotiations for the acquisition of the Lucas assets by Sherwin-Williams, the largest paint and varnish manufacturing organization in the world. Companies now controlled by Sherwin-Williams include Acme White Lead & Color Works, Detroit White Lead Works, Lowe Bros. Co., Martin-Senour Company. The acquisition of John Lucas & Co., Inc., adds to this chain five Lucas factories, the Lucas-owned W. W. Lawrence and Cleveland Varnish companies, the Lucas Kil-Tone Co. (insecticides, fungicides), and substantial interest in the British Paint & Lacquer Company, at Cowley, England.

[*Continued on page 124*]

Ever climb the dizzy heights of the family step ladder?

EVER feel that funny feeling that hits you in the pit of your stomach when somebody screams, *"Look out!"*

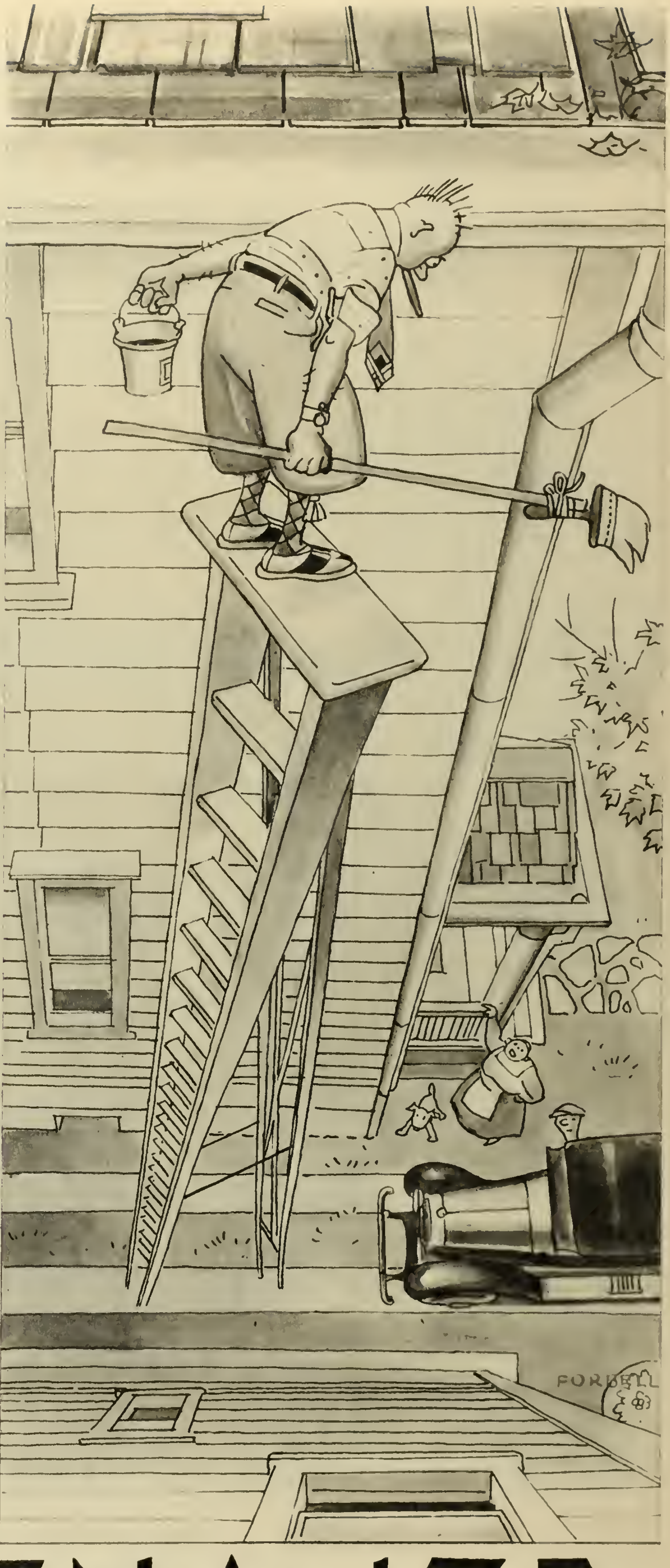
The yearly total of minor hurts of course, runs into the millions, but do you realize that *one out of every four fatal injuries happens right at home?*

Twice as many persons are injured skidding in the bathtub as by firearms! Sitting down where the bed used to be, lifting heavy objects, tumbling downstairs, falling over rugs, burning and scalding . . . such everyday accidents would take pages!

But the "unusual" happens right along, too! There's the cook who kicked at a cat and spent three months in the hospital . . . the school principal who suffered blood-poisoning from a thorn-prick received as he handed a bouquet to a girl graduate . . . .

Usual or unusual, an accident is an accident, no matter how it happens. An Ætna Accident Policy protects your income. It provides weekly indemnities for partial and total disability. It also provides liberal sums for loss of eyesight, arms, legs, etc. In addition, it makes special provisions for the payment of doctors, nurses, hospital and operation fees, and of course, provides for the family if the accident should prove fatal.

Ætna writes practically every form of Insurance and Fidelity and Surety Bonds. Ætna protection reaches from coast to coast through 20,000 agents. The Ætna Life Group consists of the Ætna Life Insurance Company · The Ætna Casualty and Surety Company · The Automobile Insurance Company The Standard Fire Insurance Company of Hartford, Connecticut.



ÆTNA

ÆTNA-IZE

SEE THE ÆTNA-IZER IN YOUR COMMUNITY – HE IS A MAN WORTH KNOWING

Burroughs

Burroughs
Hayes and Richmiller Inc.

ACCOUNTING MACHINE

For all types of bookkeeping, accounting and billing. The only accounting machine that multiplies directly. Reduces cost by posting several related records in one operation and by handling most of the detail automatically. Burroughs Adding Machine Company, Detroit

Faces of the Month

© Keystone

Christopher Morley's revivals of Victorian melodramas were successful, but his business policies were not. Hence: a receivership for his Hoboken Theatrical Company. "Business management," he now admits, "is an art as delicate as any of the more esthetic employments."

Wide World

"Few munitions makers gain much financially from their operations," declared Pierre S. du Pont over the radio. "No munitions concern can live by war alone. During the 139 years of the existence of the United States . . . there were four major conflicts before the World War. They lasted about ten years in all . . . How could any independent corporation keep itself alive for 139 years by turning out a product that was only wanted ten years of the time?"

P. & A.

Sidney Zollicoffer Mitchell and his Electric Bond & Share Co. are fast becoming a financial legend. Now there comes a possible European edition of Mr. Mitchell's best-seller: European Electric Corp., Ltd. Its charter is patterned after EBASCO's; its bankers are Bonbright, and Field, Glore; and Sidney A., son of Sidney Z., Mitchell is on the board. Swiss, Italian, and American interests have combined to form European Electric.

U. & U.

Writer Sinclair Lewis shares Writer Morley's fluctuations of fortune. In 1928 his income was over $48,000. He is now petitioning to have his alimony reduced from $1,000 a month to $200. "Reverses" have shrunk his income to a 1930 estimate of under $10,000.

International

Three serious crashes in its first half year of existence have led Transcontinental Air Transport-Maddux Air Lines to put in a new president, J. L. Maddux. It is up to him to make air travel as safe and efficient as railroad. It has been done in Europe, and President Maddux, with the aid of the heavily interested Pennsylvania Railroad, hopes to achieve it here. His first reform: retirement of six operating officials.

International

Back into business on his eightieth birthday goes Charles Ranlett Flint, "Father of Trusts" (shown with his bride, whom he wedded at 77). The innumerable corporations he has put together include American Chicle, International Business Machine, and United States Rubber. His greatest feat: organizing the Republic of Brazil and within six weeks providing it with a navy.

BURLINGAME PUBLIC LIB

International

Astounding news from New England: the Amoskeag Manufacturing Co. (world's largest maker of cotton cloth) is to pay a dividend of one dollar a share. The 10,000 employees of the Amoskeag mills in Manchester, N. H., are to receive a 5 per cent bonus. Largely responsible for Amoskeag's prosperity is Frederic C. Dumaine, who at sixty-four is the treasurer and guiding power of the company.

Faces of

That the mint growers of northern Indiana and southern Michigan are forming an organization is important news to Wrigley, Beechnut, and the other chewing gum manufacturers. For within a radius of 150 miles in that region is grown 90 per cent of the world's mint supply. Even more vitally interested in the news is the A. M. Todd Co. of Kalamazoo, Michigan. As "growers, distillers, and refiners of essential oils," the Todds market from 60 per cent to 80 per cent of the region's crop. Sixty years ago Albert May Todd (left) began to raise peppermint in St. Joseph County, Michigan; his two remaining farms, Campania and Mentha, together form the largest tract devoted to mint growing in the world. His son, Albert J. (right), is now active head of the company, which buys mint from hundreds of farmers, distills and markets it on a big scale. Peppermint (*mentha piperita*) remains the mainstay of the mint family, though spearmint (*mentha viridis*) is a younger brother that is growing in importance. The distilled oil is shipped in 400-pound drums, each of them representing from 15 to 20 acres of mint. When peppermint oil was selling for $28 a pound (normal price about $3.50), bankers in Kalamazoo and South Bend accepted drums as collateral, carefully stored them away in their vaults.

Blank-Stoller, Inc.

To the chairmanship of the $2,600,000,000 Transamerica Corporation, most gigantic of U. S. holding companies, comes able Elisha Walker, long the power of Blair & Co., merged with Transamerica. He succeeds no other than A. P. Giannini, who has for some years announced that he will retire at sixty. Mr. Walker may or may not be a "genius." Certainly few financiers enjoy such universal respect.

Courtesy Amtorg Trading Corp.

The Amtorg Trading Corporation is well known to all who have business dealings with Russia. Official Soviet trade organization in the United States, in 1929 it handled $115,000,000 out of a total of a $155,000,000 Soviet-American trade. Comrade Saul G. Bron (left), for three years Amtorg Chairman, has now been assigned to London. His place is filled by shrewd Comrade Peter A. Bogdanov (right), a former head of the Soviet Supreme Economic Council. He will carry through to completion one of Comrade Bron's biggest deals: an order with the Schenectady Works of General Electric for four hydroelectric generators which will be the largest in the world. The last of them is scheduled for shipment early in 1932. They will be used in the great Dnieper River water power project, the dam for which is now being built by Colonel Hugh L. Cooper, New York engineer. Comrade Bogdanov, able as his record shows him to be, will be hard pressed to beat the record of Comrade Bron, who has doubled Amtorg business since 1927.

Notman, Cambridge

"An unpleasant shock", commented London's *Evening News* on the appointment of Professor Oliver M. W. Sprague, of Harvard, as economic advisor to the Bank of England. "We are not a mass producing nation," gibed the *News*, "and the effort of producing John Maynard Keynes, G. D. H. Cole, and Sir Josiah Stamp probably exhausted the nation's capacity." Though admitting that Professor Sprague is probably a good man for the task of "pepping up the Old Lady of Threadneedle Street," the *News* sees the Bank's choice as "menacing . . . . because it vaguely suggests that . . . dollars now talk louder in world finance than pounds."

U. & U.

When Harvard's old locker building at Soldier's Field recently went up in smoke with all its stuffed footballs, Athletic Director Bingham phoned Clarence Dillon, Harvard '05. Mr. Dillon expressed regret, said he would pay for a new building. This was pleasing but not unexpected news to C. Douglas Dillon, Harvard '31, next year's football manager, who had been besieging his father to replace the old building. Current Dillon underwriting is not confined to the Harvard locker house. Dillon, Read's floating of a $14,000,000 loan for the great German electrical trust, Siemens & Halske, is one of the month's important economic events (see page 124).

the Month

Wide World

Unless he grows homesick for Vienna, Oscar Straus, of *Chocolate Soldier* fame, will stay a year in Hollywood, composing for Warner talkies.

International

Crude, burly Viscount Rothermere (left), turned politician, has been clamoring ineffectually with his *Daily Mail* (1,945,000 circulation) for what he calls "Empire Free Trade." More successful is his battle with Baron Camrose, formerly Sir William Berry (right), for supremacy in the provincial evening newspaper field. In 100 days at Newcastle, Rothermere founded the *Evening World*, swelled its circulation to two and a half times that of Baron Camrose's long established *Evening Chronicle*—the result of offering free a substantial dinner plus an insurance policy to long-term subscribers.

P. & A.

John Hay Whitney, Yale '26, whose personal fortune is estimated to top $100,000,000, found a job last October—as buzzer boy for Lee, Higginson & Co. at $65 a month. Recently he got a raise, becoming a clerk with a desk of his own. The Polo Association has also given "Jock" Whitney a raise: to a handicap of four goals. Mr. Whitney lunches decently at clubs; not, romantically, at cafeterias.

U. & U.

Incorporation is more and more popular among Britain's landed peers, and the latest to minimize his income tax by turning himself and his 50,000 ancestral acres into a Co., Ltd., is the young Duke of Norfolk, who has recently attained his majority. So stupid that his Roman Catholic tutors could not get him into Oxford, he is in secular rank the most exalted of his faith in England.

Wide World

To Professor Charles F. Scott, of Yale, goes the Edison Medal from the American Institute of Electrical Engineers for his work on polyphase transmission of electrical energy. His transformer changes two-phase power to three-phase.

Keystone

To Dr. Elmer A. Sperry goes the American Iron and Steel Institute Medal for his rail tester. Housed in a car traveling at 7 m.p.h., it locates flaws by their resistance to electrical currents, automatically sprays them with paint.

Wide World

Under the direction of Edward T. Stotesbury, Philadelphia partner of J. P. Morgan, the Homesburg County Prison Band renders a selection. Mr. Stotesbury gave them their instruments, as he has to many other institutions. His fondness for band music may stem from his experiences as a drummer boy in the Civil War.

Faces of the Month

Keystone

Remarkable, but not unique, among 1929 earnings reports was that of Coca-Cola Company, which showed a net profit of nearly $13,000,000 as against a 1928 net of $10,000,000. Remarkable and much nearer unique was the fact that this $13,000,000 net profit was made out of gross sales of only $39,000,000. Largely responsible is the operating talent of one of the most brilliant executives in the United States, Robert Winship Woodruff, who celebrated his fortieth birthday last autumn by becoming head of the White Motor Company. Since White is in Cleveland and Coca-Cola in Atlanta, Mr. Woodruff does much of his work on trains.

George H. Burr, investment banker, forged an important link in the projected Missouri Pacific system when he accumulated 28,969 shares of Denver & Salt Lake (the Moffat Tunnel road), sold 21,334 outright to Denver & Rio Grande Western, plus an option on the remainder —the whole constituting a controlling interest.

International

Outstanding among copper men is Daniel C. Jackling, president of Utah Copper Co., owner of the biggest open cut copper mine in the world. To him the American Institute of Mining and Metallurgical Engineers awarded the Saunders gold medal—given to John Hays Hammond in 1929, Herbert Hoover in 1928. Mr. Jackling will not receive his medal until he returns this April from Africa, where he spends much time inspecting the great African copper mines—whether from mere technical curiosity or from some more weighty motive is not revealed. The Saunders medal is given for distinguished achievement in mining.

R. H. Macy & Co., under the calm and placid direction of Jesse, Percy, and Herbert Straus, sold $90,000,000 of goods last year in their New York store alone—more than any other store in the world, possibly excepting Marshall Field. Shown here is Kenneth Collins who, at thirty-two, is the sales chief. An entirely sophisticated and un-Babbittish person, Mr. Collins likes to astonish sales conventions with such remarks as this: "We (the advertising profession) are more afraid of a joke than any other business enterprise in the world, except that of the undertaker. And sometimes I think he has a better sense of humor than we."

Cameragrams

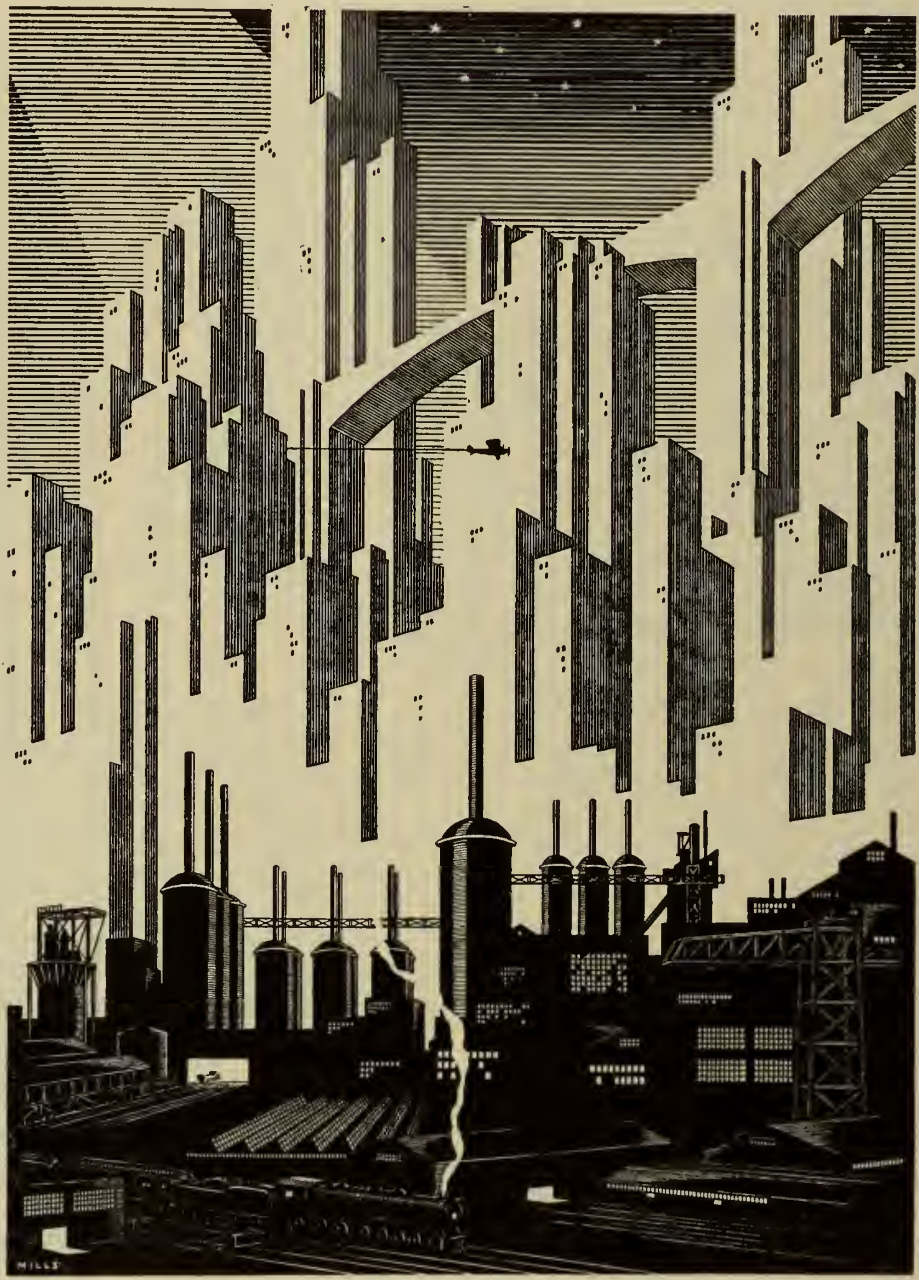
Honors are showering thick and fast upon the head (none too brilliant) of William Vincent Astor. Of late he has acquired an important interest in the Roosevelt Steamship Line. And now the New York State Horticultural Society has named him its most expert packer of apples.

Keystone

Captain William Marshall, popular commander of the *Majestic*, has been appointed Commodore of the White Star fleet, a rank which entitles him to fly a special flag, wear distinctive chevrons. Other commands have included the *Teutonic* and *Olympic*. For his service during the War, Captain Marshall was made a Companion of the Order of the Bath. For two years he was Naval Aide to King George.

The Army's chief business man is now Colonel John L. DeWitt, newly appointed Quartermaster General by President Hoover. His business talents earned him the D.S.M. during the World War for his successful organization of the supply section of the 1st Army. His predecessor as Quartermaster General, Major General B. Frank Cheatham, spent in 1928 the sum of $80,439,500.

NINETEEN-THIRTY
modernization year in industry



Mighty buildings rear their heads into the clouds . . . sturdy ships of the air drone away to distant ports . . . new products appear overnight on counters and in salesrooms everywhere.

It is a dramatic age in which industry plays a lead role, for back of all the romantic pageant are the wheels that must turn, ever faster, to set the pace of progress.

And so, *1930—Modernization Year in Industry*, marks a New Era in the design and construction of the Nation's plants . . . an Era in which Austin will be called upon to accomplish still greater achievements in producing plants to supply modern demands.

Austin's nation-wide organization is busy from Coast to Coast . . . designing and building a number of modern plants that herald the New Era in American Industry.

Executives in practically every field of business will find Austin literature, which deals with fundamentals as well as specific building problems, helpful. Wire, phone or write the nearest Austin office for the literature and approximate costs on any project you may be planning.

THE AUSTIN COMPANY

ENGINEERS AND BUILDERS • • • CLEVELAND

THE AUSTIN METHOD OF UNDIVIDED RESPONSIBILITY
Design, construction and building equipment . . . . separate responsibilities ordinarily . . . . become one unified responsibility under The Austin Method. One organization handles the complete project under one contract which guarantees in advance, total cost, time of completion with bonus and penalty clause if desired; and quality of materials and workmanship.

THE AUSTIN METHOD

New York Chicago Philadelphia Newark Detroit Cincinnati
Pittsburgh St. Louis Seattle Portland Phoenix
The Austin Company of California Ltd.: Los Angeles, Oakland and San Francisco
The Austin Company of Texas: Dallas The Austin Company of Canada, Limited

ONE OF STUDEBAKER'S 15,000. HE WORKS WITHOUT COMPLAINT

[*Continued from page 57*]

Sometimes the piece of iron is not given its final shape in the foundry molds, but is taken to the forge, there to be hammered into shape and hardened. The forge shop is rows and rows of huge hammers, so huge and strong that if you put a cat under the falling hammer nothing would be left of its nine lives but a little grease. Before each huge hammer is posted a man with tongs. All day he makes just two motions. With his tongs, for example, he grabs from a pile on the right a flat piece of red-hot iron the size of a plow base and swings it beneath the hammer. After the hammer has cracked it one hideously terrifying blow, he grabs the now bended plow base with his tongs and puts it in a pile on the left. How many, Ignatz Koscuoski, can you do in a day? "Oh, bout fi hundert." When "bout fi hundert" are done, a great bell rings. Ignatz goes for his coat and, probably all alone in a crowd of other blacksmiths, walks half a mile through the barracks, out the company gates, takes a street car for his cottage at the other end of town, and then just sits down until dinner, perhaps occasionally fondling the new baby, and after dinner sits and sits till bedtime, after which it is pretty soon breakfast.

Ignatz Koscuoski's job, some say, is exciting for him. "Once a forge man, always a forge man." He thinks hardly at all, but he has just one thought all the days of forge life, the thought that he is Vulcan. The hammer's strength is from his arms; its thunder from his voice. And the broad fire in the bulldog is his soul. Cosmic, titanic, great, majestic, not at all like the service man at the garage station who takes your silver and has to say, "Thank you,"—majestic, transcending thought, and requiring no hope. Besides, for this, he, a man of long experience, gets $42 a week, nothing to complain about.

But if temporarily drafted into this army at the gun's point, we, before risking court-martial, might select some other foundry job. The molders and core-makers, for example. We think of an automobile as not handmade. Profound, therefore, is the thought that each and every automobile is almost completely made by hand—in sand. And fascinating is the thought of playing with this sand, for molders and core-makers are nothing but players in sand. A squad of us will be posted about a circular table. In the middle of this table is a great tin pipe which reaches way up overhead. Down and out of the pipe on to the table comes sand—not quite like beach sand, for it is mixed with oil and sometimes with fine baker's flour. We cannot see the flour, but the oil comes off on our hands. You and I will be working together on either side of a little table beside the big round table. On the table will be two halves of a form—let us say, the form of a crankshaft. We take handfuls of sand and put it into the forms. Then we pat it. Then, deftly, we scatter a little extra sand here and there. Then we smack the two halves of sand-filled forms together, remove the forms, and, lo, we have a crankshaft all of sand. Actually, what we have made represents the hollow inside part of the crankshaft, for what we have made is the core—the hole in the doughnut instead of the doughnut. Much in the same way, men at near-by tables are making molds out of sand, a blacker sand, why, we know not. Later on, our core will be put inside the mold. Then, in the foundry, the red-gold iron will be poured out of ladles by brawny men, Negroes, perhaps, and will flow in between the mold and the core. When the iron cools, the mold will be broken off. Our sand core will be pushed out—and there is an iron crankshaft. But, of course, we will never see the crankshaft. We will see only core after core after core—the cores we make, perhaps a hundred or two a day. When Studebaker isn't running at full capacity (i. e., when it has laid off new hands) most of its core-makers are men who have worked right at those round tables for more than ten years.

The foundrymen take for granted the red liquid that comes out of the elephant spouts, never asking what fecund ore mountain yielded it. So Industry's other workers take for

SOUTH BEND'S RANKING GENERAL—ALBERT RUSSEL ERSKINE, IN COMMAND OF STUDEBAKER

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granted the myriad-shaped castings that come from forge and foundry. In the forge and foundry the jobs are all terribly simple and much the same. Elsewhere the jobs of the privates of the Industrial Army are all a little different. At Studebaker, for example, there is a man who gets the first look at the completed car after it has run off the assembly line under its own power. Usually the doors aren't hinged exactly right—so he pulls and bangs them into position and can finally say O.K. Then, on the assembly line is pretty good fun. Along comes a skeleton. One man clamps on a bracket. Another rushes in and screws. Several yards down, the engine drops into position while four or five men lean over and bolt it. Another man lifts down from overhead an ungainly shiny black gas tank, drops it into place, and somebody else bolts that. The thing grows. Fifty feet from the start you can see it's certainly going to be an automobile.

None of all these men talk to each other. They are busy every minute, but never in conference. And nothing ever happens, except what is always happening like breathing or digesting, except, of course, when blood sometimes spurts out of a nipped finger or when they get laid off.

Bendix

Abandoning for a while our picture of modern industry in general, let us look at a few notable South Bend modern industries in detail. We will begin with a man named Vincent Bendix, who is really an industry in himself. It was as cadet rather than private that Vincent Bendix entered the Industrial Army. But he did work long hours at machines, and privates were his friends. Now he is worth at least $50,000,000 and has recently been the biggest news in South Bend. Bendix is automotive. Bendix starts most of the automobiles in the world, and he stops nearly all of them. Most self-starting devices are hitched up to Bendix starter-drives, and nearly all brakes are Bendix brakes. Not only does he do business with nearly every automotive concern in the world, but nearly all the business he does is done with friends. It is Walter and Charlie and John (Chrysler, Nash, Willys). Bendix talks a great deal—with a reason. He talks to his friends vis-à-vis or over the phone to cheer them and make them happy. He talks to his customers, big fellows, to his lieutenants, to his workmen. He makes more appointments than he can keep. One time in a Paris hotel he had twenty-five men waiting in an anteroom. He had made an appointment with them all for the same time. Early one morning in his $500,000 Chicago apartment some men were waiting for him when he woke up. He saw them at once. Others began to come, and soon three or four conferences were going on in three or four different rooms, so that it was not until six o'clock in the evening that Mr. Bendix managed to get out of his pajamas. And you may well understand that a pajamaed Bendix is no mean sight, for the great Bendix is great not only in stature but also in girth. Such a man, of course, is not ordinary mortal. In no sense is he Napoleonic, but cheerful and easy to get on with. He suffers fools gladly. Nevertheless the Bendix personality is hypnotic. It engages; it persuades; it makes men go out and cheer with an abandoned admiration. Such a man, of course, is not to be regimented. However good a machinist he might have been, no machine could have held him in place—partly because he was a minister's son and partly because he had had a course in engineering. Always he was tinkering. Eventually he tinkered out "the mechanical hand which cranks our car" and revolutionized automobiling the world over. And then he tinkered out an automobile brake. A brake is a very simple thing. It is simply something to step on the wheels when you step on it. The Bendix brake is several pieces of steel which fit inside a band of tough fabric which fits inside the inside rim of the car's wheel. When you step, the pressure applied forces the brake mechanism into contact with the revolving wheel, and this induces the famed Bendix Servo action—an action which automatically uses the very force of the movement of the car itself to stop the wheels. The sum total of these little gadgets and the really not very complicated manner in which they are arranged makes the Bendix brake just a trifle better than any other mechanical (as distinct from hydraulic) brake, so that practically every car has to have them. But the two thousand men and women (a goodly number of strong-armed women in dark blue overalls which make chunky squares out of their figures) who make Bendix gadgets do nothing at all dramatic. They are mostly hitched to not very big machines which punch holes and weld pieces together—miles and miles of whir and drone and clack, clack, clack. But there is something different in this Bendix plant. It's partly speed—the little gadgets fly out of the machine as if in a race, and no sooner are they out than, whoop, a load of them is shot over to another machine. It's partly that the eyes of the workmen and women snap. They are like cats playing with mice, never catching them Foremen and foundrymen are like iron cows chewing their cuds in hell. What with eyes snapping and nuts rattling and the possibility that Vincent himself may any minute come down from Chicago and stride through one of the machine lanes, you get the feeling that the men with BENDIX blazoned on the back of their smocks really know what they are doing and almost care. Is Vincent himself the reason? Is he one of those great generals whose image is always before soldiers?

This Vincent Bendix is certainly one of the two dozen most significant generals-in-chief of the Industrial Age. His significance has gone far beyond the stages of the time when he was a tinkerer. He is always looking for patents to buy, and many are the patents he has bought. Wise, clever, however, without the sinister tendencies of the monopolist, he uses the patents he gets hold of to the advantage of others as well as to himself. Rather than tack on a big price to the amount it costs him to manufacture an article, he adds just enough to give the Bendix Company profit. Thus are big motor men satisfied, for suddenly they discover that he can do the manufacturing cheaper than they could if they should set out to compete with him and invent their own appliances.

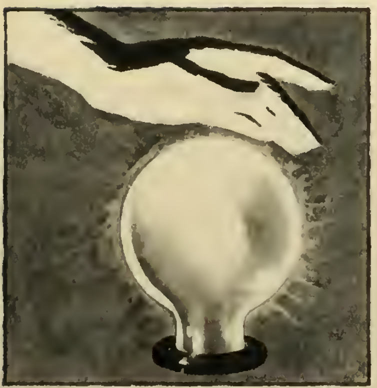
His home, he says, is in South Bend, he having purchased one of the mansions vacated by a departing Studebaker. And he himself, not Mrs. Bendix, is filling it with rugs and miscellaneous paintings and inlaid tables and tapestries. But he is not often there. His geometrically progressing affairs require a Chicago base, 38th and 39th floors of the Bankers Building, whence he is daily in touch with Detroit, New York, Paris. No longer content with being the very agreeable spider at approximately the center of the automotive business, he is fast becoming a No. 1 general in aviation. Rapidly his South Bend plant expands. Roofs even now are being hammered into position above thousands of feet of new floor space. Thither he goes several times a week from Chicago via automobile or Samuel Insull's wonderfully comfortable electric railroad. On one trip he fairly staggered a blond, blue-eyed Irishman, named Mahoney, who had been working for him, by saying, "Mahoney, you are general manager." Then back he went to Chicago, leaving in the Mahoney blue eyes a Tennysonian determination. Thus, for all his absences, Bendix is an ever-present power in South Bend. For years, people had been trying in vain to get Daylight Saving adopted by the city. Last year it was adopted—the Bendix Company announcing the fact in the local press somewhat to the bewilderment of the City Fathers.

Studebaker—Erskine

But this industry-spanning Bendix is not the ranking general of South Bend. The ranking general is Albert Russel Erskine, president of the Studebaker Corporation. Today only one Studebaker (Henry's son, Will, the paymaster) works for Studebaker. There is indeed a smart son-in-law of J. M.'s, a New Jersey patroon named Frederick S. Fish, who is still chairman of the board, but the years are upon him. Headman is Erskine, who is curious for more than one reason. In the first place, he is a Southerner—a way-down Southerner, even an Alabaman, one of the few who have become tycoons of the North. And he differs in nearly every respect from the founding Studebakers. They worshipped God with undoubting Presbyterian (John) or Methodist (Clem) regularity. Erskine worships only at intervals. They played games of chance with apologies, if at all. Erskine is akin to many of the world's greatest spirits in loving to watch the intricate dance of mathematics with chance. Not the Church but Business deters Erskine from his gaming. He heard, some years past, that his entirely legitimate relaxation was being discussed by penny-pinching gossips. Bad for business, thought he, and with almost calvinistic devotion to his cause, he foreswore his pleasure. This interest in the laws of chance has a much deeper significance and brings us to the most curious aspect of the Erskine position. Mr. Erskine was not primarily an automobile man—he was a man of figures. Ford, Chrysler, Nash are motor men—and until recently all strictly automotive tycoons have been production men or, in a few cases, supersalesmen, such as Willys.

Mr. Erskine's success in a highly competitive business, based on engineering, becomes, therefore, a strange but significantly modern phenomenon. The Great Age of Business begins to

FOUND . . .



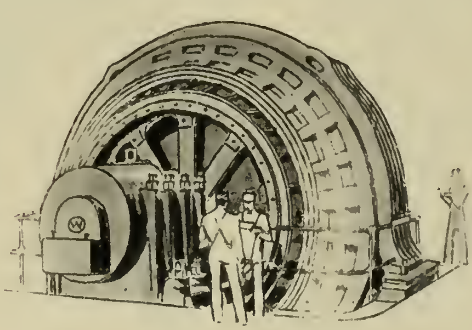
a way to improve ALADDIN'S LAMP

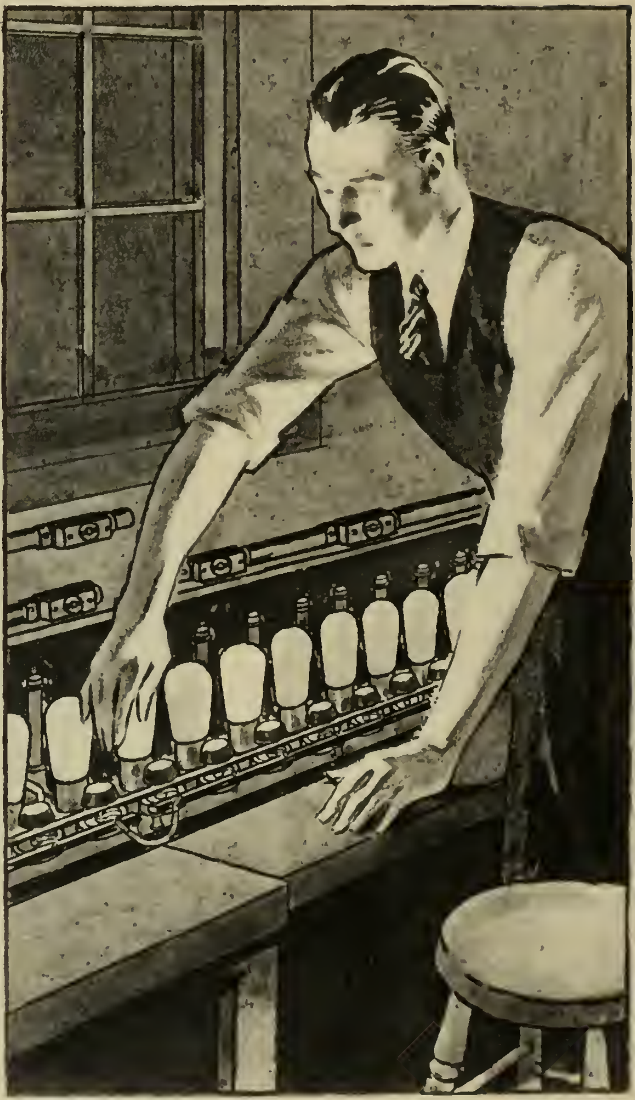
LESS than three years ago a row of glow tubes sat in a test rack before a window in the Westinghouse research laboratories at East Pittsburgh.

D. D. Knowles glanced at the group one morning and noticed that some of the tubes quite unexpectedly were glowing, while others were not. Some tubes, it was discovered, glowed when the sun was shining and went dark on cloudy days, others responded when a hand touched the glass.

It was quickly recognized that an important new electrical development had come to light. Thousands of tubes were made and tested. Shapes of various parts were altered until a relay was available—so sensitive that a tiny pulsation of energy, less than that expended by a fly walking on a window pane, was made to control enough current to operate machines rated at thousands of horsepower. Thus was born the grid-glow tube. Because of this development a hand waved lightly over a crystal ball in New York City started giant motors in the Homestead Steel mills hundreds of miles away. Aladdin's lamp, which had to be rubbed to get results, is outrivaled by the grid-glow tube which responds to a mere wave of the hand.

To magnify human capacities is the daily work of the Westinghouse organization. In research, in the design of electrical and allied equipment, in the application of electrical power to new tasks, in the distribution of electrical apparatus for homes, business, and industry, Westinghouse is constantly active . . . to the end that electricity may continue in countless ways to help you get more for what you spend of time, money, and energy.





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BURLINGAME PUBLIC LIB.

resemble the Great Age of Government—19th century England. Then it was that Disraeli could be a brilliant Chancellor of the Exchequer, although he could only with difficulty add or subtract. Now it is that a man who cannot carve a steak can supply millions with meat. And so, also, an Erskine can annually get ten million dollars profit out of an automobile he cannot make. Mind, if you like, over matter.

One recent achievement quickly illustrates the unerringness of the Erskine mind when it encounters figures. Late in 1928, the Studebaker Corporation bought most of the Pierce-Arrow Motor Car Company. The Pierce-Arrow company seemed in a hopeless condition—all sorts of bonds and preferred and common stocks and almost nothing in the way of earnings. Mr. Erskine's engineers having sensed a chance to make a more fashionable Pierce-Arrow, Mr. Erskine quickly resolved the financial difficulties into possibilities. He put $2,000,000 cash into Pierce-Arrow, and in 1929 the Studebaker share of Pierce-Arrow profits exceeded $2,000,000—an utterly amazing and astounding feat, enough to make every Studebaker stockholder rise up and call him more than blessed.

The past seven years have been years of great prosperity for the automotive business, but years of frightful competition. To an independent like Studebaker, it might well seem that General Motors would never stop. Meanwhile Chrysler came in with an enormous bang. On the lower flank, Ford gathered up all his energies for sales of a new car, greater than ever. Hudson, Packard, Nash—all have done enormously expanding business, and new life has been thrust into a dozen other concerns. Under such conditions, any one concern might well have slipped. But not Studebaker. True its earnings have not kept to the 1923 peak, but they have been so consistently high that investors habitually regard Studebaker common as underpriced.

Here, then, is the principal business man of South Bend. On six days of the week he drives from palace to plant. The administration building houses a museum wherein are the Studebaker masterpieces. There you will find, of course, outstanding Studebaker models of past decades. But more interesting are the old Studebaker wagons, carriages, and buggies. Priceless, some of the relics must be: the carriage in which President Lincoln rode the night he was shot; the closed carriage which belonged to President Harrison, and his family after him for many a year; the carriage which carried President Garfield to the train which in turn carried him to his death in Buffalo.

Several floors above the museum is Mr. Erskine's office—the only really "grand" office in town. It is big, has tapestry chairs, and a wrought-iron grilled archway. There you will find him as often as not in golf knickers—a big six-footer with white hair. Throughout the building are hundreds of clerks adding up figures. And for miles behind his back stretch the factory buildings with guards at each entrance. Back there are the foundry and forgemen, the coremakers, the machinists and also the carpenters for body building, and the central power house with gigantic smokestacks three. Also, among those miles of buildings are miniature hospitals, and railroad tracks with freight cars lumbering along around unexpected corners, and dining rooms with good food and pretty waitresses who offer you, among many other things:

Peaches .10
Purée of Navy Bean Soup .10
Roast Ham, Raisin Sauce .25
Assorted Cold Meats with Salad .25
Browned Potatoes .05 Spinach .05
Chocolate Pie .08 Ice Cream .05
Butter .02 Roll, each .03
Service .10

But you don't have to have service if you don't want it.

Steady work with a break for lunch—and the score at the year's end is $170,000,000 of business.

But the most remarkable fact anent Studebaker today is that it is run by only two other men besides Mr. Erskine. One vice president, Harold S. Vance, in charge of manufacture, and one vice president, Paul G. Hoffman, in charge of sales—and there you have the management in toto. No interfering directors, no complicated and unwieldy committees—let only these three agree and a thing is done.

STUDEBAKER BODIES CALL FOR STUDEBAKER CARPENTERS

Dealing as we are primarily with what goes on *in* South Bend, the most interesting man in South Bend is Manufacturing Vice President Vance. He it is who really rules the Studebaker half of the army of South Bend. After the triumvirate has decided how many cars of each model are to be made this month, it is he who schedules the hundreds of different jobs of the ten or fifteen thousand men who will make them. Unlike militarists or philanthropists, he seeks to employ as few men as possible. But attempts at decreasing the costs of productive labor (man power) are not so all important as many a layman might think. That fact is easily explained. Productive labor at Studebaker is only about one ninth of the total cost of car building. Overhead and materials account for the rest. Let us say a Studebaker were to cost $900 to construct, a correct figure for some models. Mr. Vance would pay out $100 in labor on the job. And he would find it most difficult to pay less, except by decreasing salaries—an unlikely measure. No more is man actually *productive* labor; he stands by the machine and the machine does most of the work. He must be there, but he cannot do more than the machine will do. Thus because it is the least important of the three divisions, and because it is the hardest one to do anything about, it is the last one in which Mr. Vance would seek to cut down costs.

But let us look for a moment at the other two divisions under Mr. Vance—overhead and materials. In that same $900 car, overhead is allotted $200. An astoundingly high figure, you might say. But that includes everything not quite tangibly productive: the engineering department, upon which Studebaker must spend $1,500,000 a year; a $2,000,000 coöperative fund for employees; repairs, renewals, upkeep of the plant, amounting in all to $6,000,000; motor trucks to do odd jobs; the scrub women and the sweepers; the clerical force; all these and many more—an aggregate bill that hovers around $27,000,000 a year. But here it is, Mr. Vance will tell you, that much time and thought and ingenuity can be spent to reduce, reduce, reduce. Mr. Vance might issue an order that would mean the company's getting along with a few less inspectors, not so many sweepers, a smaller army of stenographers; or he might find light bills too high, or too many engineers. In overhead the ax might swing and swing again, for overhead is most susceptible to wise manipulation.

To the third division, the $600

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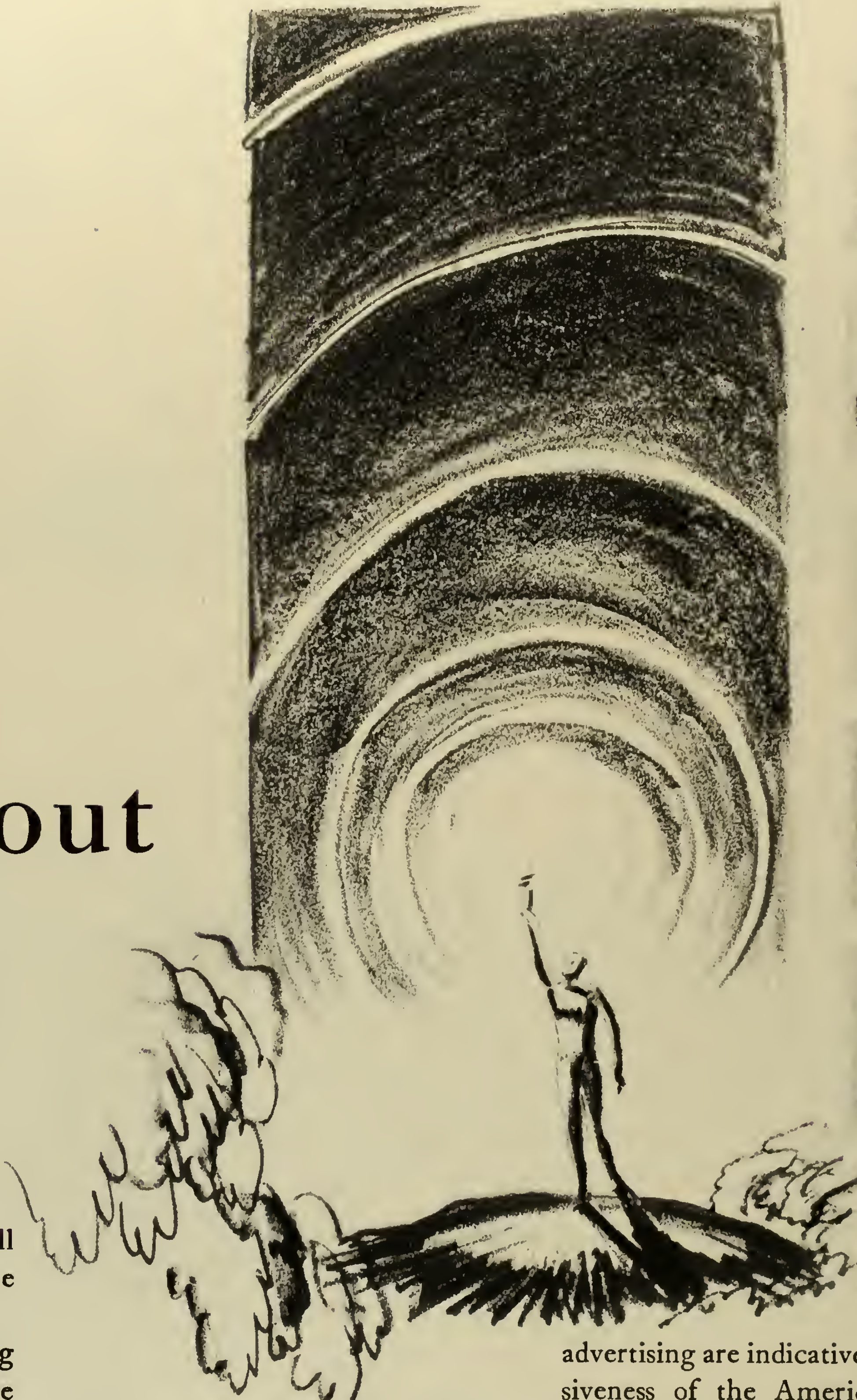


Companion
American
2,300,000
Paid Circulation
Collier's
Country Home
25

The first twenty-two issues of Crowell Magazines for 1930 have already gone to press.

These twenty-two issues are carrying $1,308,313 more advertising than the same issues a year ago.

The latest issues, upon which an accurate count has been made, show a gain in circulation of 1,063,186 over the corresponding issues of the last year. These *gains* in circulation and *gains* in advertising are indicative of the responsiveness of the American people to constructive, clean, helpful, progressive editorial material—and forceful advertising.

WOMAN'S HOME COMPANION, THE AMERICAN MAGAZINE, COLLIER'S, THE COUNTRY HOME, THE MENTOR

Crowell PUBLICATIONS

MORE THAN 8,500,000 CIRCULATION

CROQUET BALLS PROVIDED THE ONLY PUBLIC SPORT OF THE GIRLS OF 1874—NUCLEUS OF MR. BADET'S NICE MILLION DOLLAR BUSINESS

PLOW SHARES FROM THE OLIVER FORGES. ONE MAN PUTS ABOUT 500 OF THESE UNDER THE HAMMER EVERY DAY

division of materials, many strings are attached. For keeping down costs on materials means far more than just paying the least amount of money for leather and wood and paint and all the other standard equipments of an automobile. Most motor men will admit that many companies pay the same amount for these things. Even tires—when one manufacturer comes down on his quoted price to a motor car company, the others are sure to follow, and quickly. But Mr. Vance will feel the strings pulled by zealous and ambitious salesmen in the field; such-and-such a car has this, why can't Studebaker? Salesmen say that new-fangled windshield wipers and fancy dashboards and deftly turned radiator caps help to sell more cars. And yet even so small a thing as a slight change in the way a tire carrier is constructed might move up the cost five dollars. That $600 allotted to materials must not go up too much, or the public, who pull other strings, will feel it in an increased retail cost.

These things are Mr. Vance's to watch and settle. Quietly he works, and with a smile; perhaps his feet will be on the desk when you call; perhaps he is pacing up and down his large, airy office; perhaps you will find him out, conferring maybe with the other two of the triumvirate. But undoubtedly you will find his mind on Studebaker, for the army which he generals is a large one and he must not loiter at his task. Nor does he want to; Erskine picks his rulers well.

As you leave the plant you realize that at the company the name of Studebaker as it applies to individuals is almost forgotten. But in South Bend, even today, you will still find reminders of the Studebaker family, besides the rambling factory buildings with the signs on all their doors, "This is a Studebaker Year." There is the Studebaker Mail Order Company, which has been doing a thriving business for 30 years and has as its head Colonel George M. Studebaker. When you meet him you are likely to forget that he is the son of Clement the First (and therefore a nephew of old J. M.) for he tries to be abrupt and peppery and to make you forget everything except that he doesn't want to see you. But he is in a hurry and will smile before he rushes off to another one of his offices. It might be the office of the South Bend Watch Company for which he is bound. This is the business of which his nephew, Clement the Third (a departed Chicago Studebaker) is president, but of which he, George, is a guiding factor because it is owned by his mail order company. This watch concern is a handsome little affair and is equipped to make about 75,000 watches a year.

Or Colonel Studebaker might be keeping an appointment with a man named Frederick H. Wellington, who is board chairman of still another Studebaker enterprise—Colin B. Kennedy Corporation, acquired by him last year through that same mail order company. The radio company has plans and facilities for building from 1,000 to 1,500 sets a day, and Colonel Studebaker hopes to do a business of four or five million dollars this year. Not unambitious is *this* remaining Studebaker.

Newer Industries

On one almost noiseless street and just across the alley from old Mr. Badet's South Bend Toy Mfg. Company is another $1,000,000 business. You enter a side door and feel as if you had invaded a privacy, for twenty stenographers look up at you like startled geese, and as rapidly resume a forceful pecking at their machines. One of them saunters toward you, stops to drink at the ice water tank immediately at your left, and returns to her place. Her forearms are muscular. All their forearms are muscular. They type continuously, not love letters but something quite as personal, for they write only to fishermen and only about fishing. The South Bend Bait Company is America's most famed bait and fishing tackle concern, supplying about one tenth of all the $11,000,000 worth of bait (not counting worms), rods and reels bought annually in the United States. Bass (big mouth, small mouth), trout (speckled, rainbow, brown, in brook or lake), salmon trout, pike, pickerel, muskellunge—each must be caught and each with a different "lure," not to mention the great salt water giants, tuna, tarpon, bonefish, sailfish. Most famed of all lures is South Bend's own Bass-Oreno. Other lures are changed or abandoned, but in some remote moment of inspiration it was found that just that oval inch or two of light wood with just that combination of white, scarlet, and yellow would make the bass leap most foolishly for death. This year some 200,000 Bass-Oreno will be bought by the world's fishermen. This is quickly learned from a gentlemanly fisherman and business man, with whom you may walk into a small room where the sweet stench of banana oil adds knowledge to your nose—banana oil to varnish the gay colors. Upstairs, he will open a great cupboard which contains the treasure of the business—long slices of bamboo poles which have come in boats and trains from China, each pole costing about one dollar. From these, with refinements of artistry, are made fishing rods for which fishermen may pay from $5 to $100. (Many is the tycoon who has ten or twenty thousand dollars' worth of fishing tackle.)

The rods are made from splits of bamboo by men. The lures are made by women. Lures are made of many things—woods and metals and chicken feathers. Women sit at long tables and pluck from various boxes the constituents of each lure which their fingers automatically put together. But all lures—wooden or feathered—have hooks. And these hooks come from Norway, for there, in such small quantity as is needed for hooks, is made a finer steel than Bethlehem (Pa.) can bother with. Here, as nowhere else in South Bend, you feel that something is being made personally for somebody. Just this lure will bring just the moment of exaltation to our friend Herbert Hoover or John Smith in a water which only he will forever recall. And just this is worth more to South Bend Bait Company than all their balance sheets can show. For example, Mr. Ivar

Hennings (chief owner, and so famed among sportsmen that Sidney Smith talks about him in his cartoons) boasts that he has a "proving ground" for which Studebaker would pay millions. This is what he means. If he wants to test a new lure, he will send it to fifty or one hundred of his customers, such as Zane Grey, asking them to report on its merits. For his sake, and without rewards, they will promptly abandon civilization to endure sun or storm. To him they will send voluminous reports, from which the behaviorism of a certain fish with respect to a certain lure can be analyzed to a fin's point.

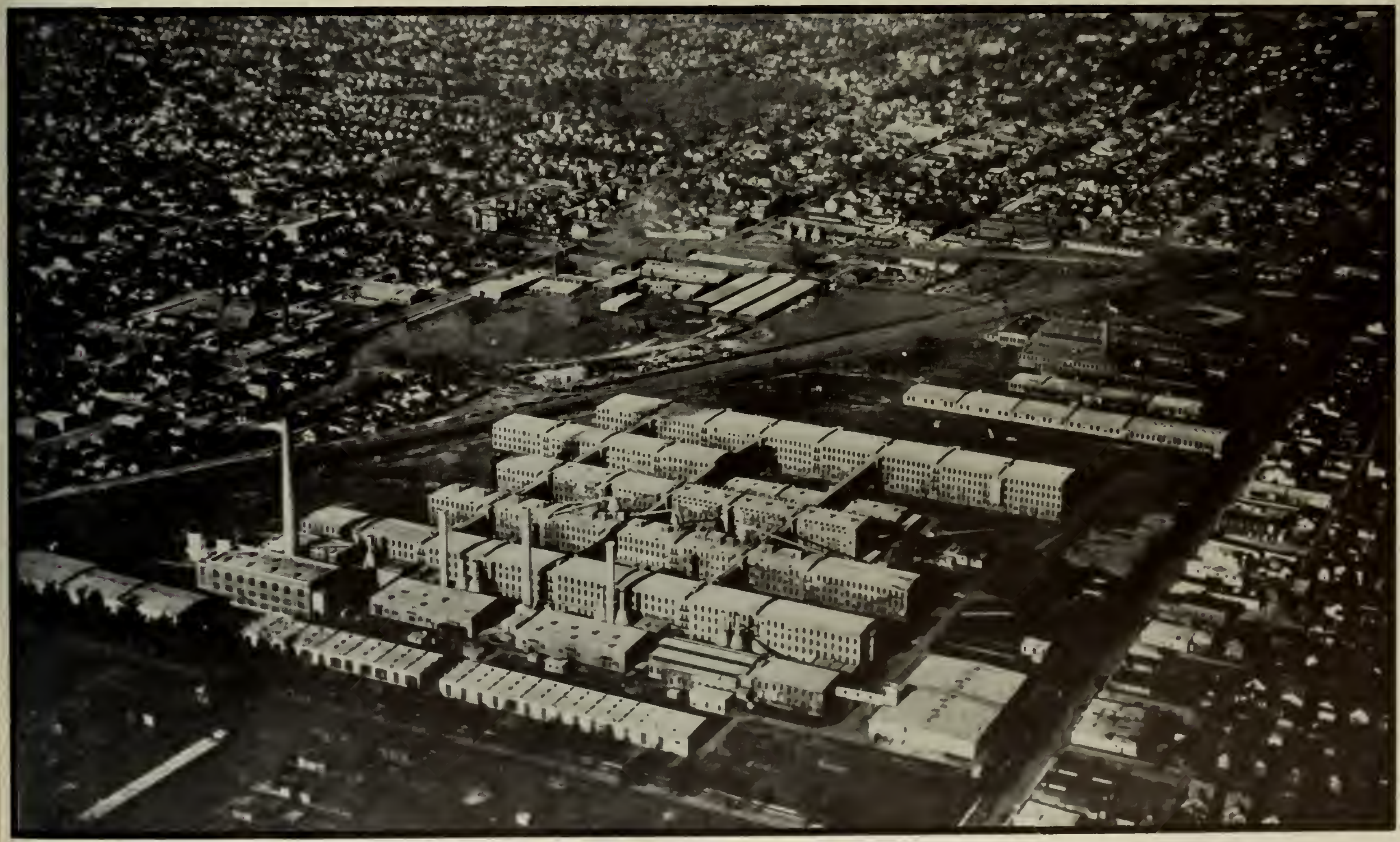
As unlike wiry, slender Mr. Hennings in stature and demeanor as their product is unlike his lure, are the O'Brien brothers (not related to George of the varnish company). It was twenty-three years ago that these twin brothers, now greying, twinkling-eyed, stoutish, began to interest themselves seriously in lathes. Then it was that they founded the South Bend Lathe Company. Since then it has always been the same. One year James J. is president; next year Miles will be. They take turns. But it should not make much difference to you which is president now; they look alike, and both will sit down and talk to you in white linen dusters. They will admit that they do not specialize in very tremendous lathes, nor do they make to order. But the ones they make, ranging from 350-pound babies like the one they recently sold to William Wallace Atterbury (a Christmas present to his son), to three-tonners, are shipped to seventy-eight countries; 5,000 of them a year with an average price of $500 each. Two are now with Commander Byrd; many more with practically every large industry you could name right off. Big users are the electric companies—Western and General Electric, Westinghouse, on down the line. And even submarines—some of them—have South Bend lathes.

Farther out of town than the lathe company, farther out even than the O'Brien Varnish Company or Wilson Brothers' factory is a street of new, clean-looking buildings. If you went by hurriedly and did not bother to read signs over their doors, you might think they were school buildings or libraries or museums, perhaps. But this street is a street of factories: newcomers to South Bend, all erected within the last two years or so. You begin to read the names: John Baumgarth Company ("Art in Advertising"), a brand new printing plant that roams over four acres and more; M. B. Skinner—steam specialties is its specialty; the Empire Box Company; Bantam Ball Bearing Company; Bike Web Manufacturing Company, whose products you might recall having seen advertised; and the Belleville Lumber Company. These are the new South Bend, with near them pretty little houses—also the scheme and planning of a Belgian named Colpaart, who could see no reason why South Bend should not have its home real estate and factory development combined—to everyone's advantage.

Back to town again, past the row of department stores, across an intersection where a bell tinkles and traffic changes, up toward the Palais Dance, across from the bank whose president, Rome Stevenson, is now a vice president of the American Bankers Association, into the hotel that old James Oliver used to run. Liveries run at us—but butchers they might be or bakers or grocers. We move among the movie palaces, gas stations, realtors, chamber of commerce, barbers, candy stores, trolley cars, "eat" signs, morticians, porters, flunkies. We hear: "Thank you, sir" . . . "Come again" . . . "Greatest in the world" . . . "Pleased to meet you" . . . tip . . . "Goodby." This was what we saw first—the visible half which loudly greeted, and with a hot, trade-lustful hand now bids farewell.

South Bend, inland, artless, most unepical, having its visible and invisible halves, a city of 100,000 souls with world-demanded products to the value of more than $300,000,000 per annum, a great American average. One one-thousandth of America.

An autumn sun is setting. Follow it out through the fields. It is harvest time. The air is heavy with a smell of most exquisite richness which rises and falls in intensity. It is the smell of peppermint squeezed out of barnlike presses. These Indiana and southern Michigan fields produce 90 per cent of all our peppermint, enough to flavor all America's chewing gum. And in 1930 the peppermint business is to be organized. A South Bend aroma duly organized with intent to pervade, profitably, the nation. But the moral eludes us, the pompous generality is obscure. The sun sets. Cars come out from town, stop on the roadside, switch off their lights. In perfume of peppermint, love, too, is made.



Ewing Galloway

SOUTH BEND FROM THE AIR. IN THE FOREGROUND THE CABINET WORKS OF THE SINGER SEWING MACHINE COMPANY

ESTABLISHED 1818.

Brooks Brothers,
CLOTHING,
Gentlemen's Furnishing Goods,
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Outfits
for Southern
Wear

Send for "A Wardrobe for
THE SOUTH"

BRANCH STORES
BOSTON
NEWBURY CORNER OF BERKELEY STREET
NEWPORT PALM BEACH

Railroad Consolidations, Old and New

[*Continued from page 40*]

removed two sources of stockholder discontent. But the main reason for the remarkable docility of the stockholders was that 61 per cent of stock of both companies was owned by the same stockholders. Where no such common interests exist, the problem of minority stockholders often threatens the entire consolidation program. The Van Sweringens in particular have watched their plans come perilously near this rock.

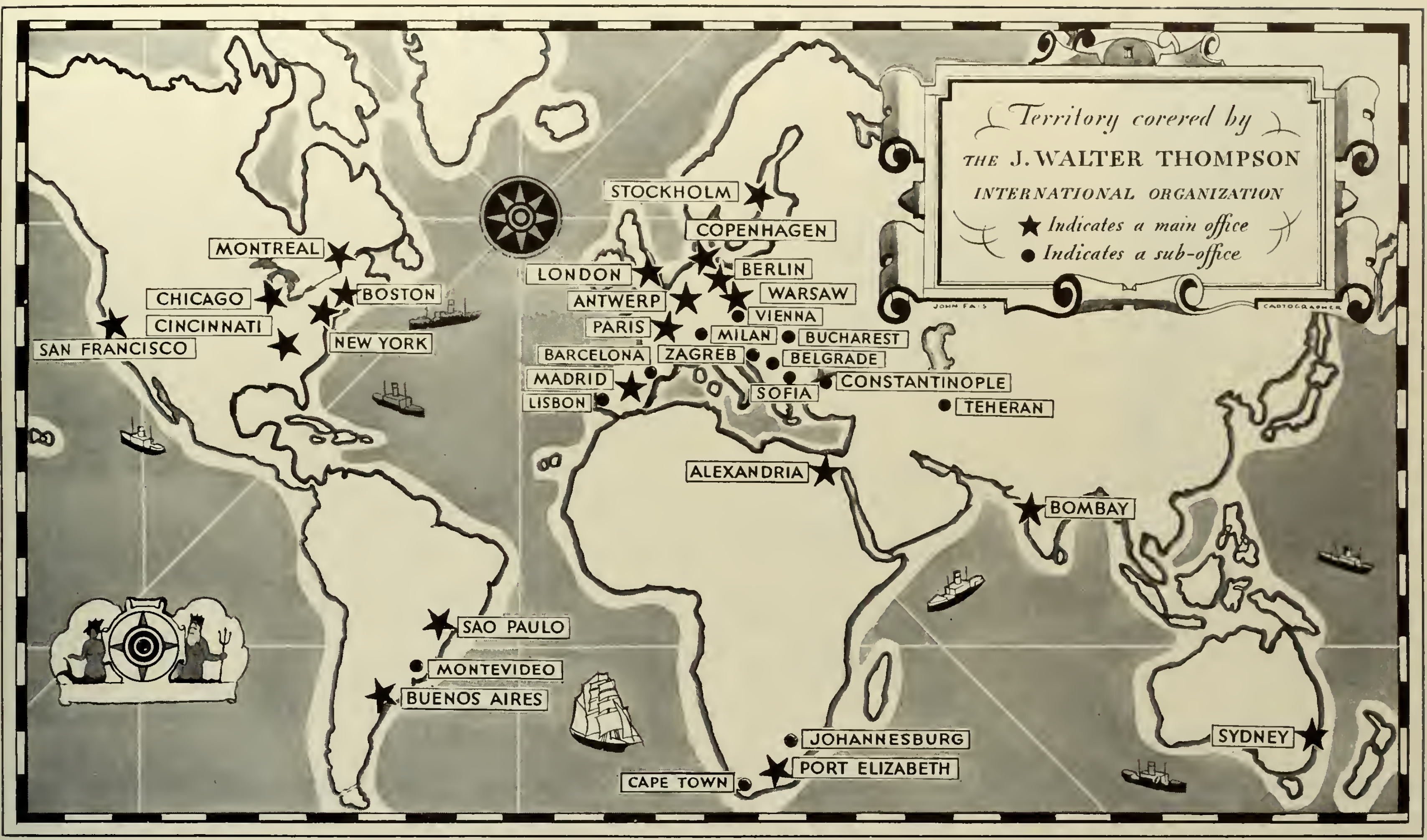
The Short Lines.—The Transportation Act in opening the door for consolidation had especially in mind the short and weak lines. They run over some 50,000 miles of track and perform many vital functions. The Death Valley Railroad in California, a road 20.6 miles long, originates and handles all the borax produced in the United States. There were many short lines in 1920, and the way to keep running was the great railroad problem. A decade of railroad prosperity since then has transformed many a 1920 weak line into a 1930 strong line, but the treatment of short lines still looms large in every consolidation. When a system grows in size, the short lines connecting with it grow even punier in relation to the giant. In order that the short lines may keep on serving their communities, the new system must often make some provision for taking them over. Railroaders of the old school chafe at this burdening of the strong with the weak. Leonor F. Loree, trained under Harriman, disregarded short line interests in his 1926 southwestern merger plans. When short line officials protested at the hearings, he bluntly replied: "This is an age of competition." His attitude toward the short lines may have been one of the reasons that the Commission frowned on his project. There is a growing tendency to regard the short line problem as one which the large systems must intelligently shoulder.

The Final Plan

Under the terms of the Transportation Act the Commission could permit no consolidation which was not in harmony with its Final Plan. This argued the existence of a nation-wide framework into which the railroads themselves might fit each separate regrouping and readjustment, and on December 21, 1929, the Commission provided such a framework. Many of the systems it outlined are already in existence or have long been in process of organization. But others were pictured for the first time and measurably startled the railroads involved. The most intense interest centered about the Commission's handling of the trunk line situation, and here it was that the Plan was most surprising.

The New York Central, already consolidated, was not much changed; the Pennsylvania, which desires no change, was called upon to give up its stock interests in the Wabash, the Lehigh Valley, and the Norfolk & Western; both the B. & O. and the Van Sweringen's Chesapeake & Ohio–Nickel Plate systems were confirmed and strengthened; and all the roads which were left over, which have been bones of contention throughout the last ten hungry years, were astonishingly swept into a fifth trunk system headed by the Wabash. To this system was granted nearly every road it had sought; others were showered upon it for good measure. The constructive work of the I.C.C. in the East appears most clearly in this table:

BALTIMORE & OHIO		CHESAPEAKE & OHIO		WABASH	
Roads Desired	*Allocated to*	*Roads Desired*	*Allocated to*	*Roads Desired*	*Allocated to*
Reading Co.	B. & O.	Hocking Valley	C. & O.	Lehigh Valley	Wabash-Seaboard
Central of N. J.	B. & O.	Pere Marquette	C. & O.	Wheeling & Lake Erie	Wabash-Seaboard
Buffalo, Roch. & Pittsburgh	B. & O.	Erie	C. & O.	Pittsburgh & West Va.	Wabash-Seaboard
Western Maryland	Wabash-Seaboard	Nickel Plate	C. & O.	Western Maryland	Wabash-Seaboard
Detroit, Tol. & Ironton	½ B. & O. ½ Wabash	D. L. & W.	C. & O.	Akron, Canton & Youngstown	Wabash-Seaboard
Lehigh & Hud. River	New Haven	Virginian	N. Y. Central	Ann Arbor	Wabash-Seaboard
Wabash	Wabash-Seaboard	Wheeling & Lake Erie	Wabash-Seaboard	Chicago & Ill. Midland	C. & O.
Ann Arbor	Wabash-Seaboard	Chicago & Eastern Ill.	Chicago & No. Western	Lehigh & New England	New Haven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COPENHAGEN
LONDON
ANTWERP
BERLIN
WARSAW
VIENNA
PARIS
MILAN
BUCHAREST
BARCELONA
ZAGREB
BELGRADE
MADRID
LISBON
SOFIA
CONSTANTINOPLE
TEHERAN
ALEXANDRIA
BOMBAY
SAO PAULO
MONTEVIDEO
BUENOS AIRES
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FOR NEARLY ELEVEN YEARS *the J. Walter Thompson Company has been building a world-wide organization of* fully-equipped *branch offices. Today this organization reaches 58 nations through 20 main offices and 10 sub-offices.*

On-the-spot Surveys to answer the question . .

"How *can* I *increase* Export Sales?"

FOREIGN MARKETS *offer a growing opportunity for American-made products.*

Exports of electrical machinery, for example, increased 60% last year . . . of industrial machinery, 32% . . . of manufactured foodstuffs, 5% . . . of chemical and allied products, 15%.

Possibly export business may be available to you at lower cost than equivalent domestic increase . . . . . Possibly it is wise that export volume be built into a bulwark against inevitable fluctuations in domestic demand. Already several outstanding American firms are securing a profitable 10% to 45% of their total sales abroad.

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The specific functions of this organization are market analysis, sales quota building, and advertising—*founded on first-hand contact with consumer preferences and prejudices.*

Working with us, the exporter deals with a single agency, yet secures direct personal contact in every important market of the globe.

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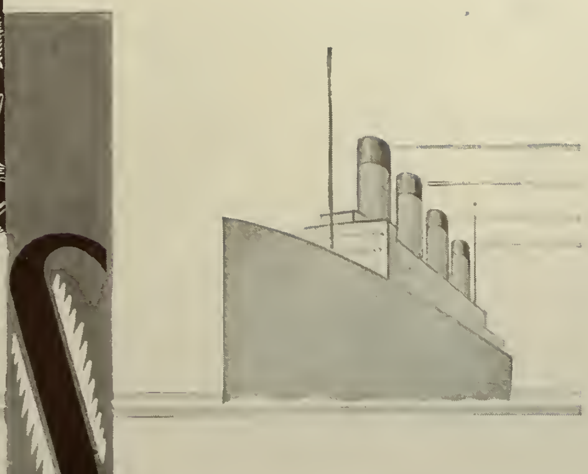

"Take this Cablegram"

"SAILING OLYMPIC TONIGHT STOP ARRIVE PARIS FOR MEETING FRIDAY"

EXECUTIVES bound for Europe favor the White Star express service, because it enables them to round out a full week at the office, enjoy a week on the briny, and report punctually for business appointments in London or Paris over the following weekend.

No time need be lost on the run if work is pressing. Seek out a secluded spot on the mammoth liner and dictate away to your heart's content. Keep track of the market by radio, and in touch with your office the same way.

Plenty of social gaiety aboard ship, when you need a bit of relaxation—with the healthful tang of the sea to put new ozone in your lungs and give zest to your jaded appetite.

Sail on the *Olympic*, if that's "your" steamer, or on the great *Majestic*, world's largest ship, or the stately *Homeric*. Many other popular liners to choose from, including the *Belgenland*, famous as a world cruise ship; *Lapland, Minnewaska, Minnetonka, Adriatic*, etc.

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IMM

WHITE STAR LINE
RED STAR LINE
ATLANTIC TRANSPORT LINE
International Mercantile Marine Company

Less spectacular than this new eastern grouping, but perhaps of greater economic significance, is the tendency of the Plan to break up the east-and-west trend of rail combinations. Instead of directing trade routes toward the Atlantic ports, the Plan diverts them to the Gulf of Mexico. Instead of converging on New York, Philadelphia, and Baltimore, its systems radiate out from the great midwestern centers, from Kansas City and St. Louis. Thus the Union Pacific is deflected to the Gulf at Kansas City by the addition of the Kansas City Southern, and the Chicago & North Western by additions is carried from Chicago straight down the length of the country to Mobile. The allocation of the Seaboard to the Wabash, of the Katy to the Burlington, and the grouping of the Frisco with the Rock Island all tend to divert traffic from the congested Atlantic ports. Plainly the Commission believes the days of the Atlantic seaboard's traffic dictatorship are ended; the new capitals are dotted along the Mississippi Valley.

How final?

One more aspect of the Plan must be noted before leaving this introduction. It is at least possible to look at the little pamphlet brought forth by the Commission, not as the *Final Plan*, but as *Report No. 12964*, an interesting and moderately helpful document which is more of a textbook than a handbook. There is some reason to believe the Commissioners themselves take a rather academic view of their work. Almost since the Transportation Act instructed them to formulate a plan, they have been beseeching Congress to be relieved of the task. As Congress has done nothing about their yearly petitions, they now reluctantly produce something which they could title "A Possible Arrangement of Some 1,400 Railroads."

This is not because the Commissioners are not intelligent men, or because they are unwilling to work, but because there already exist such close relationships between the railroads that arbitrary gifts to this or that system may well be impossible to effect. Within the last few years a new factor, in the form of the railroad holding company, has made these relationships even more complex. While the I.C.C. has jurisdiction over all companies engaged in interstate commerce, it is doubtful how much control it has over a company which hauls no trains, navigates no rivers, but owns a dozen blocks of stock in as many railroads. The brilliant Van Sweringen brothers, with the help of J. P. Morgan & Co., created such a company when they created the Allegheny Corp.; and the Pennsylvania and Kuhn, Loeb & Co. did the same thing with Pennroad Corporation. The Commission observes that intersystem holdings by one of these companies would defeat the purpose of the Plan and properly insists that its twenty-one systems must be independent in fact as well as in name. No one will argue the point with the Commission, but how, Mr. Williams may wonder, can the new Wabash effect such more or less heroic divorces as these:

Company	*Now Controlled by*
Wabash	Penn. R. R. (48.8%)
Lehigh Valley Co.	Penn. R. R. (30.2%)
Pittsburgh & West Virginia	Pennroad Corp.
Wheeling & Lake Erie	Nickel Plate
Western Maryland	B. & O.
C. & O. of Indiana	C. & O.
Norfolk & Western	Penn. (42.6%)

To make the Wabash system alone, these are the eggs which would have to be unscrambled. Add the separation of the Burlington from the Great Northern and Northern Pacific, the divorce of the Mobile & Ohio from the Southern, the surrender by the New Haven and the Pennroad Corporation of their holdings (respectively, 26 per cent and 15 per cent) in the Boston & Maine, and it begins to be clear how deep a cut the Commission would make across the corporate relations of the roads. In many cases officers of the controlling roads have already declared publicly that divorces are unthinkable. Short of an act of Congress, it is hard to see how such violent and wholesale changes can be made in less than a century of litigation.

This is not to say that the Plan is without merit or that it has not made its contribution to the solving of the railroad puzzle. The most cursory glance at these maps will show innovations suggested by the Commission which can be, and probably will be, put into effect quickly and advantageously. The Commissioners do not expect much more, and it is inconceivable that Mr. Williams, knowing the nature of the trials through which he and his fellow railroaders have passed and must still pass, should think that an end has been given "to these things also."

THE MOTOR CAR BUILDER "TALKS CAR" WITH 10,000 OWNERS

THEY are *his* cars. No matter how many thousands have come off the assembly line—no matter how far away they have been sold—*his* cars still. ● He knows every feat of engineering skill that has improved their performance, every obstacle that has been surmounted in building them. Who, better than the automobile manufacturer himself, can make the new owner believe in his car? ● If the head of a great motor company could actually "talk car," face to face, with the men who buy his automobiles, he would have the most loyal group of owners on earth. ● What he *can* do—has already begun to do, in a few instances—is write a real, personal letter to every car buyer. Through such a letter, telling how to use the car and how to get the most out of it, he is able to fire the customer with his own strong enthusiasm. And if the message is typewritten and hand-signed, *on a letterhead of Coupon Bond,* the reader knows it is genuine the moment he picks it up. ● Why have so many of the country's leading firms selected Coupon Bond as the foundation for all their executive letters? Because it is a supremely fine grade of bond paper—100% clean, new rags. And because its nationally known watermark proclaims its quality wherever letters are read. ● Our portfolio, "The Modern Trend in Letterheads," and a new booklet, "The Executive Letter," will be sent you on request. (In writing for them, please use your business stationery.) ℭ *Coupon Bond is but one paper in the Eagle-A Line of Bonds, Ledgers, Writings, Index Bristols, Offsets, Covers, Book Papers, Mimeograph and Manifold Papers—the right paper for every business purpose.*

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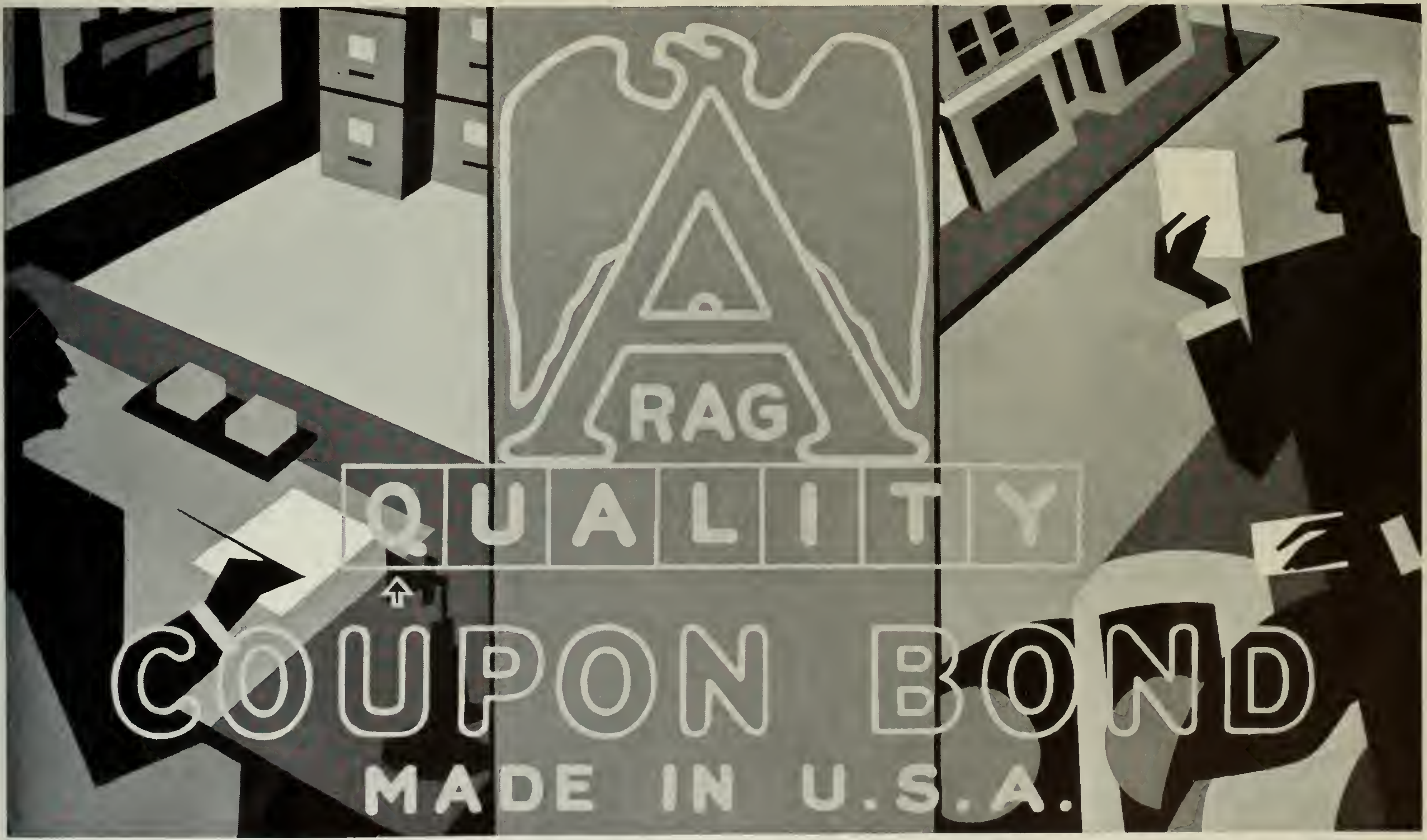

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Five and a half days to Plymouth, England

By de luxe Weekly Express Service, New York direct to Plymouth, a waiting express for London, a few hours later the covered pier at Havre, three-hour express to Paris. ∞ The new "*Lafayette*," the "*De Grasse*" and the "*Rochambeau*" form a cabin fleet that makes economy smart.

French Line

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Mr. Kuhn and Mr. Loeb

[*Continued from page 90*]

enjoyable. Freudians, perhaps, would consider him a thwarted artist, would cite his early devotion to music (he still plays piano, 'cello, violin) and the poems and dramas composed at the age of sixteen and burned by the author's family. They would instance also Roger Wolff Kahn and the elder Kahn's encouragement of the younger Kahn's jazz orchestra. But such a theory leans toward the sentimental. Almost every civilized person is artistic in his youth, and those truly possessed of the creative impulse seldom turn out to be international bankers of the first order.

Nor should Mr. Kahn's public reputation obscure his professional talent. On the wall of his downtown office hangs a framed and commendatory letter from Edward H. Harriman—a souvenir of Kuhn, Loeb's successful reorganization of the Union Pacific in 1897. In Germany, in England, and in the United States (he has been a citizen of all three countries) Mr. Kahn has been for almost fifty years a banker, and on Wall Street his knowledge of Little Theatres has long been balanced by his knowledge of Big Railroads.

Kuhn, Loeb Partner Felix Warburg belongs to the famous banking family which came to Hamburg, Germany, during the 16th century, where, in 1798, was founded the 130-year-old banking house of M. M. Warburg & Co. He came to America in 1894, married Frieda Schiff, daughter of the late Jacob Schiff, in 1895, and became a Kuhn, Loeb partner in 1896. His brother, Paul Warburg (who married Nina Loeb, daughter of Solomon Loeb) was a Kuhn, Loeb partner from 1902 to 1914. Prior to the War, the Kuhn, Loeb–Warburg connection was of the utmost importance, as the United States was then a debtor nation whose bankers turned frequently to Europe to finance their enterprises. Felix Warburg shares the traditional Kuhn, Loeb philanthropy, has in one corner of his office a filing system to keep track of some fifty or more charities.

The modern internationalism of money is well evidenced by the presence of Sir William George Eden Wiseman, 10th Baronet, as Kuhn, Loeb partner. Sir William, emphatically a Britisher, fought on the Western Front, was gassed at Ypres, and, invalided from active service, came to America as a kind of chief propaganda agent for the British and Allied forces. After the United States entered the War, Sir William and Colonel Edward M. House became very friendly, and when the War was ended Sir William and Colonel House continued to exert their unofficial but considerable influence at the Peace Conference, Sir William being adviser to the British delegates on American affairs. He returned to America with the Balfour Mission and, in 1921, became Kuhn, Loeb member, was made a partner in Kuhn, Loeb, January 1, 1929. He is also a Paramount Famous Lasky director.

Other Kayell partners are Jerome Jonas Hanauer, George Wallace Bovenizer, Lewis Lichtenstein Strauss, and Gordon Leith. Mr. Hanauer, who has been with Kuhn, Loeb for forty years (since 1891), supervised the financing of railroad equipment during the War period of Government control. He was also in charge of the allotment of Liberty Loans. Irish-born, Mr. Bovenizer articled himself to Kuhn, Loeb at seventeen, studied banking by night at New York university, progressed steadily to his present position as partner and head of the bond and syndicate division. Mr. Strauss was the confidential secretary of President Hoover from March, 1917, to September, 1919, worked with him at sessions of the Supreme Economic Council and Peace Conference. He was also with Mr. Hoover at Palo Alto on the night of the presidential election. He met Mortimer Schiff in Paris in 1919, joined Kuhn, Loeb the same year, and on January 1, 1929 (along with Mr. Bovenizer and Mr. Wiseman) became a partner. Mr. Leith is London representative, heads also his own London firm.

The history of a banking house is almost entirely the history of its bankers, so that as the eight present partners are the Kuhn, Loeb of today, the previous partners were the Kuhn, Loeb of yesterday. But though no man dominates today, there is no question but that one man alone was largely responsible for the rise of Kuhn, Loeb to its position today. This man was, of course, the late Jacob Henry Schiff. Born in Frankfort in 1847, Jacob Schiff came to America in 1865, and, after a varied brokerage and banking experience, joined Kuhn, Loeb in 1875. Founded in Lafayette, Indiana, about 1850 by Abraham Kuhn and Solomon Loeb,

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a radically new idea in calculating machines

Fast—you can multiply, divide, subtract and add more rapidly than you ever believed possible. Silent—as pencil and paper. Sturdy—constructed to handle quantity production of figures without strain or fatigue. There's a place in every business for this new small Electric Monroe . . . . . .

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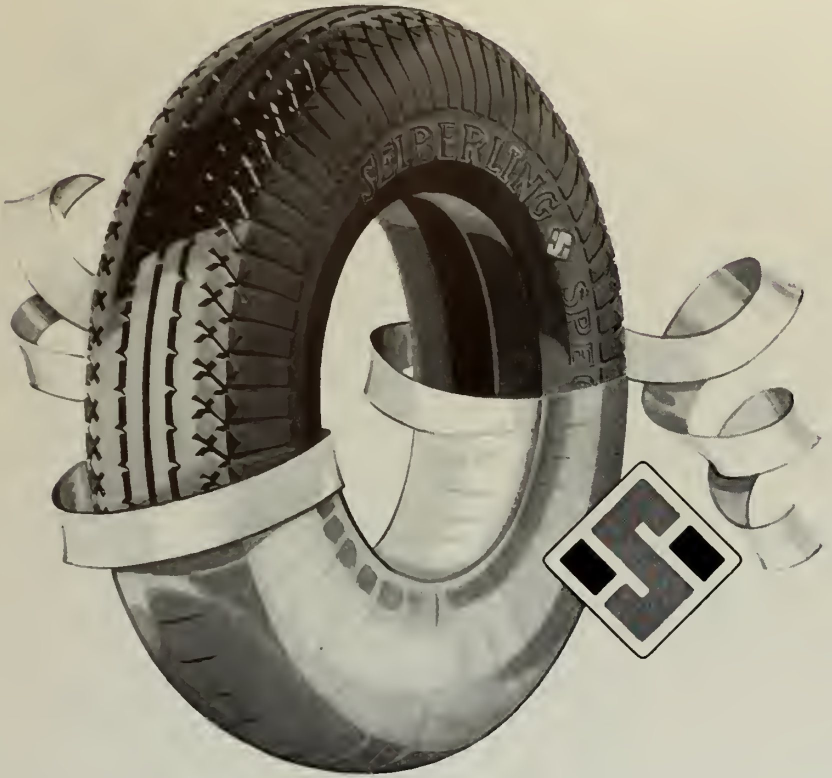

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Seiberling

moving later to Cincinnati, the firm of Kuhn, Loeb & Co. successfully operated a general merchandise business, in connection with which they extended considerable mercantile credit. In 1865 (the same year that Mr. Schiff came to this country) the partners decided to retire and moved to New York, intending to lead lives of leisure. In 1867, however, they went back into business, this time as commercial bankers in New York City. Mr. Kuhn died within the decade, and in 1885 Mr. Loeb virtually retired, leaving Mr. Schiff as sole director of Kuhn, Loeb fortunes.

A detailed discussion of Mr. Schiff's work in the next two decades would involve a history of American railroads, plus at least several chapters from the lives of Samuel Rea, James J. Hill, and Edward H. Harriman. In a summary of a few sentences, it may suffice to point out two sufficiently obvious facts—that before the century there were few great industrial combinations: financing in its largest aspects was almost entirely connected with the railroads; and that these railroads were largely built with European capital. With his many Continental connections (especially Sir Ernest Cassel and Max Warburg), Mr. Schiff was well able to bring European money into American railroads. Men like Hill and Harriman were the rail kings of the period, but it was Mr. Schiff, who, in a large measure, supplied the revenues of their empires.

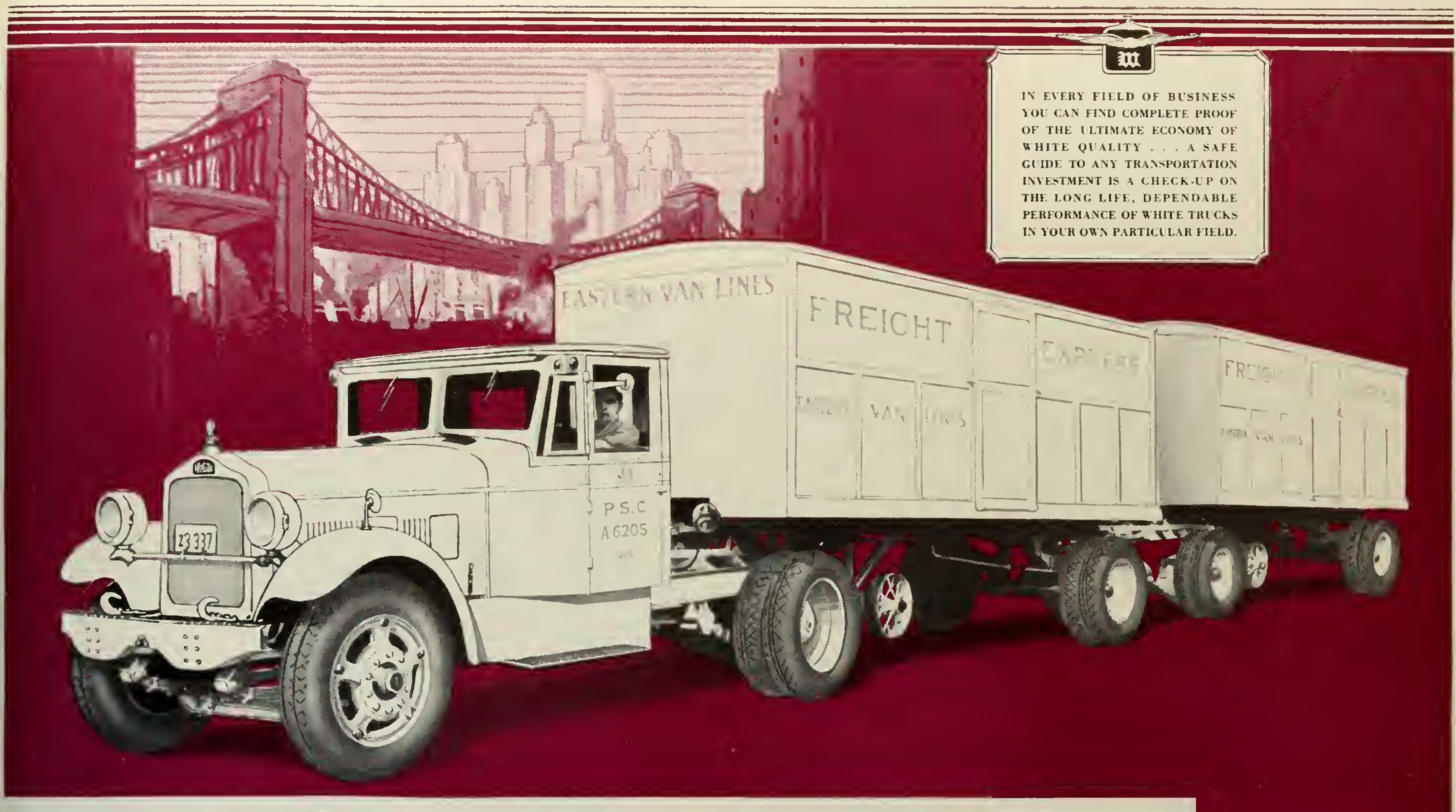
Plastic Age

[*Continued from page 82*]

holders. These are made by the same processes as are employed in pyroxylin and casein products: the liquid resin itself, with no important additions beyond coloring matter, is cast into blocks and machined into shape. But synthetic resin is important because of its industrial products, which are made by less direct processes. The Bakelite Corporation makes no telephone receivers nor automobile parts, and yet its products are on every telephone and automobile in the country. To various licensees the Bakelite Corporation supplies synthetic resin. Under the name of "Bakelite A" it goes as a powdered crystal to the Atwater-Kent factory, where it is combined with finely ground sawdust (wood flour), heated, and molded under pressure to form radio parts. Or it goes as "Bakelite Liquid A," a dark, honeylike substance, to Westinghouse Electric, there to impregnate sheets of cotton duck or Kraft paper, and, after the proper squeezing and heating, to emerge as "laminated phenol," material harder and tougher than wood. By the first method (molding) are made radio and automobile parts, telephones, electrial instruments, door knobs. By the second method (lamination) are made insulating materials, wainscoting for interior decoration, table tops, timing gears. That it can be reënforced with raw materials like sawdust and cotton cloth makes synthetic resin so valuable to industry.

Makers.—The dominant figures in resin plastics are the five Brothers Karpen of Chicago—Samuel, Leo, Adolph, Michael, and Oscar—probably the largest makers of upholstered furniture in the United States. They became the controlling factors in the Bakelite Corporation when their synthetic resin company, Redmanol Chemical Products Company, merged with Bakelite. Karolith, greatest of the casein plastic makers, is likewise Karpen-controlled. Bakelite has one very important competitor: Durez, a comparative newcomer to the field. More recent developments that may or may not challenge the supremacy of Bakelite and Durez are the discovery by Dr. Hal T. Beans, chemist at Columbia University, of Durium, a synthetic resin that makes flexible, unscratchable Victrola records, and the growth of a resin cryptically called "Beetle" by its maker, the American Cyanamid Company. Two years ago some plastic manufacturers held a dinner, at the conclusion of which, by way of a toast to the industry, they hurled the plates madly about the room. Made of Beetle, they caromed noisily but safely off the walls.

Future.—The tale of the Beetle plate-hurling no longer thrills plastic makers because it is past. More useful is the suggestion that Beetle crockery be used in lunatic asylums, jails, and on wild parties. Raw materials for plastics may be discovered anywhere, in the deeps of the sea, in a tree top, in a goat's udder. The product itself may be transformed into a speedboat or into a Corinthian column. It is an industry with a promising past and an unpredictable future.



IN EVERY FIELD OF BUSINESS YOU CAN FIND COMPLETE PROOF OF THE ULTIMATE ECONOMY OF WHITE QUALITY . . . A SAFE GUIDE TO ANY TRANSPORTATION INVESTMENT IS A CHECK-UP ON THE LONG LIFE, DEPENDABLE PERFORMANCE OF WHITE TRUCKS IN YOUR OWN PARTICULAR FIELD.

A heavy duty economy truck for faster movement of heavy loads—

There is an increasing need for a truck unit that has ample power and capacity to handle heavy loads on faster schedules with greater economy. White designed the Model 59 six-cylinder for this purpose.

It is built entirely to specifications to fit the individual needs of the operator who has an unusual hauling job. The Model 59 is available in a variety of wheelbases as a regular four-wheel chassis or a six-wheel tractor type with drive on all four rear wheels.

The adaptability of this model, the dependability of its performance and the marked economy of its operation have proved the solution of many problems in heavy duty hauling. The powerful six-cylinder engine supplies ample power for the easy handling of peak loads at sustained highway speed. Westinghouse four-wheel air brakes assure positive control at all times.

For trailer operation or for relatively high-speed operation as a heavy duty truck the Model 59 delivers an entirely new type of transportation. In city or long distance hauling it meets every requirement for higher average speed, greater capacity and more power in the transportation of extremely heavy loads.

Today no operator need go beyond the facilities of the White Company for any transportation requirement where the utmost economy of operation and the availability of widespread service are demanded.

THE WHITE COMPANY, CLEVELAND

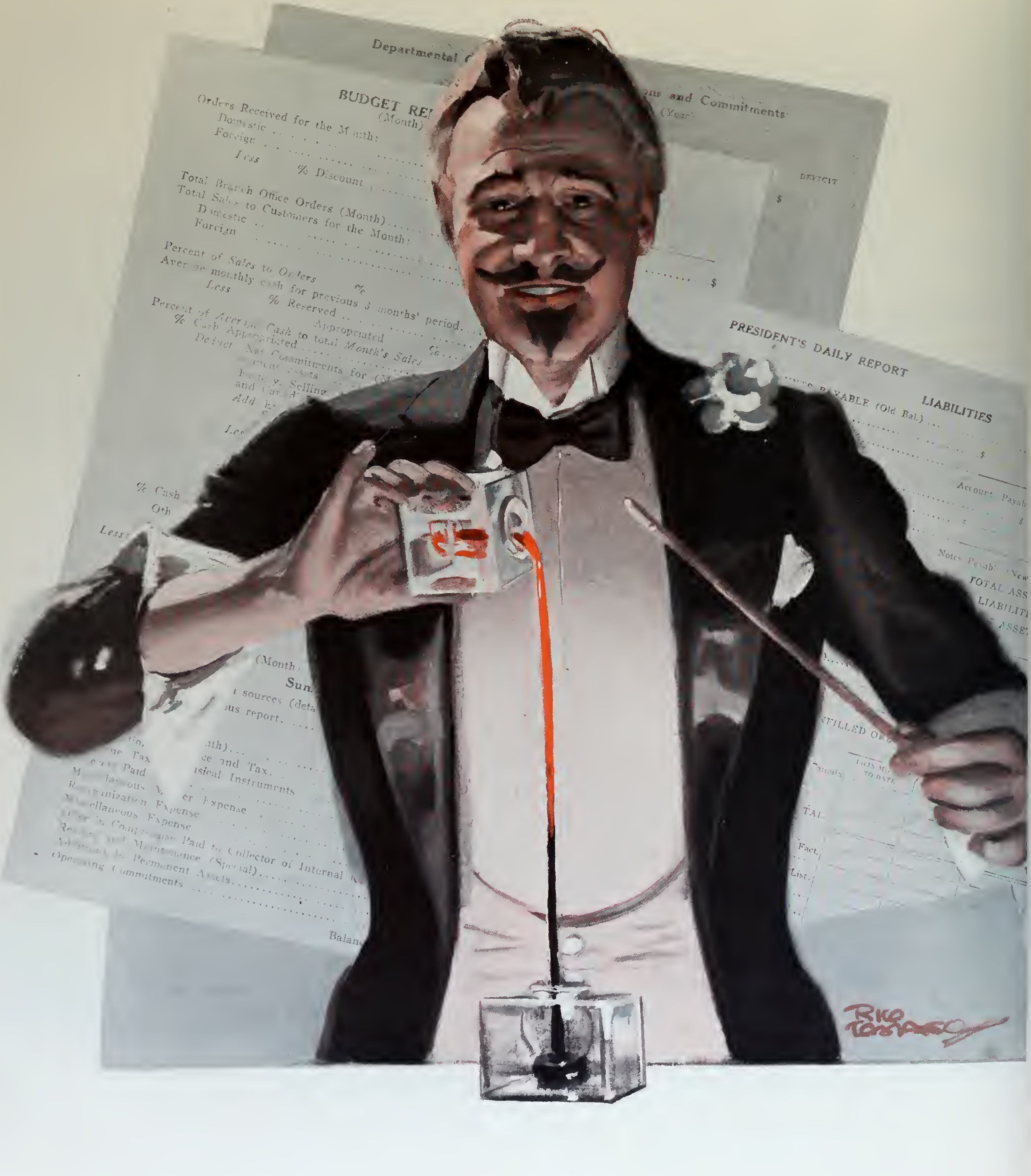
WHITE

A COMPLETE LINE OF FOUR AND SIX CYLINDER

TRUCKS
BUSSES

"BUDGETARY CONTROL"

The Magician that turns RED ink into BLACK


Departmental
BUDGET RE
(Month)
Orders Received for the Month:
Domestic
Foreign
Less % Discount
Total Branch Office Orders (Month)
Total Sales to Customers for the Month:
Domestic
Foreign
Percent of Sales to Orders %
Average monthly cash for previous 3 months' period
Less % Reserved
Appropriated
Percent of Average Cash to total Month's Sales
% Cash Appropriated
Deficit
ons and Commitments
(Year)
DEFICIT
PRESIDENT'S DAILY REPORT
LIABILITIES
PAYABLE (Old Bal.)
Accounts Payable
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TOTAL ASS
LIABILITI
UNFILLED OR
Balan
Operating Commitments
Rico Tomaso

THE EMANCIPATION OF THE AMERICAN BUSINESS MAN

For Years, John Smith, mass-production manufacturer, did business on the advice and counsel of Messrs. Hunch and Hazard.

He consulted his intuitions, took chances. Usually things turned out pretty well.

But came the day when his hunches began to back up on him. Sales costs mounted alarmingly—and he didn't know why. Operating expenses ran rampant—and he didn't know why. Somewhere in the business there were hidden chasms, hungrily swallowing revenue—but he didn't know where.

So he S. O. S.'d his banker. "What I need is more financing," he declared, "so I can do more volume. That will cut the overhead—and the red in the balance sheet."

"What you need," replied the banker dryly, "is the guidance and warning of more facts and figures. Scarlet fever in the balance sheet is usually due, so I have observed, to fact-and-figure malnutrition in business. You need a Budget Control."

. . .

There are times when even disappointing advice has to be considered. So Smith began in the Sales Department. Installed a *Visible* "Customer's Record" of the condition of every account in the house. With this new system, displaying every customer's name and transactions in plain sight, he had only to run his eye over the edges of the record to see at a glance who was buying and how often—and who wasn't and how long since. The vivid color signals flashed the whole story of each account.

Every day's figures . . . every day!

But equally important was the daily digest of sales information which the new fact-and-figure-gathering machines and systems automatically brought to his desk. A "break down" of sales-totals for the day, the month, the year, by items, models, prices and colors. Thus he got a constantly up-to-date and accurate picture of sales trends, pocketbook appeals, style preferences and changing tastes.

With these semaphores of demand to guide him, supplemented by sales estimates from his salesmen, managers, and dealers, he was able to formulate an intelligent and a reasonably safe Sales Forecast for the coming year, a dovetailed production schedule and a proper allocation to each department of expenses and income.

The composite of these forecasts, he called his *Budgetary Control.*

And so he began sailing his ship by the compass of reliable information instead of by his wits and the stars.

And vermilion changed to ebony!

At the end of the first year, the vermilion in the balance sheet had been changed to a healthful ebony. Inventories were almost nil. Waste and extravagance showed up as infinitesimal. For whenever any department had stepped out of line with the Budget, his daily statement showed it—and he promptly probed for the trouble.

. . .

Today it is comparatively easy for any business to install and enjoy the intelligent guidance of adequate facts and figures. Automatic machines and systems are available for making lightning records, tabulations and digests of all the statistics, operations and transactions in any given business.

If you feel the need of skilled and unbiased counsel on any feature of your fact-and-figure gathering business equipment—or even if you merely seek to make sure you are right in every detail of your present office systems and machinery—please feel at liberty to call on Remington Rand!

The services of a Remington Rand Business Analyst, to confer with you in your own business, are yours for the asking—with no obligation entailed on your side.

His counsel will be unbiased. For Remington Rand men are not special pleaders for any particular device or system. Remington Rand is centralized headquarters for the best of *all* office equipment and machinery.

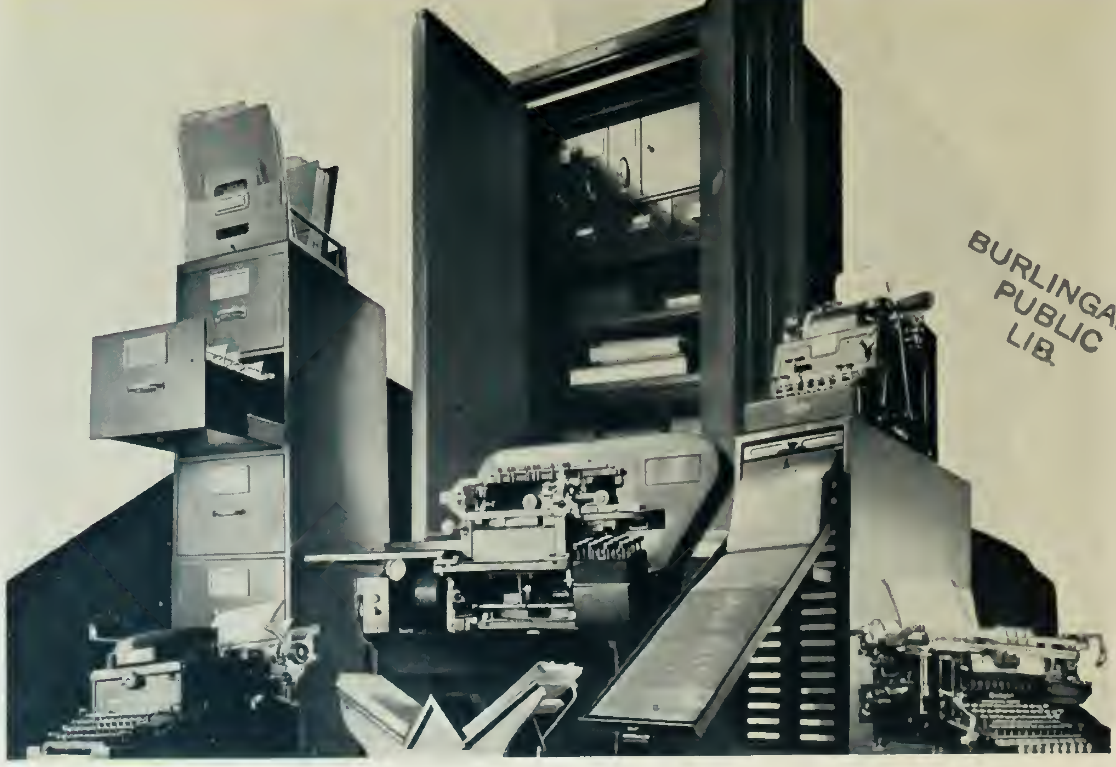
Simply write or 'phone to the nearest Remington Rand office.

Remington Rand

BUSINESS SERVICE

REMINGTON *Typewriters and Accounting Machines* . . . LIBRARY BUREAU *Filing Systems and Indexing Service* . . . RAND & KARDEX *Visible Records* . . . SAFE-CABINET *Record Protection Devices* . . . INDEX VISIBLE . . . POWERS *Accounting Machines* . . . DALTON *Adding & Bookkeeping Machines* . . . KALAMAZOO & BAKER - VAWTER *Loose Leaf Equipment* . . . *Executive offices, Buffalo, New York. Sales offices in all leading cities.*

THE GREAT EMANCIPATORS



BURLINGAME PUBLIC LIB.

"I SEE A DARK CLOUD OVER YOUR FUTURE"

As the smoke from a fire obscures the light, so the after-effects of Fire's damage often spread and expand until they blot out all hope of your getting back on your feet.

What sort of business future would *you* have if fire . . . or some other destructive force . . . should destroy the property that produces your business income?

Fire insurance will take care of fire losses to the property itself. But what of the costly idle months before your store or factory or apartment block is again producing?

Adequate property insurance is essential, but have you thought of the effect on your business . . . if fire should stop your income for six or eight months? It is income that makes your profits, pays your employees, meets your fixed expenses.

© H. F. I. Co. '30

There's a dark cloud over the future of any business that stands to lose its profits, its orders on hand, its ability to keep its working forces together . . . because of Fire.

It's good business to look this question squarely in the face. The Hartford Agent* near you can give you some figures and facts that will startle you. Maybe it's disconcerting — but isn't *this* the time to be disconcerted — when you can *do* something about it? *Individualized insurance,* as applied by the Hartford Agent, fits every special need of your special case. It meets intelligently and accurately the various stunning losses that Fire can deal your business.

It's good business, too, to deal with an experienced insurance man in this important matter — a man backed by a sound, strong and well-managed stock insurance company.

THE
HARTFORD FIRE INSURANCE COMPANY
AND THE **HARTFORD ACCIDENT AND INDEMNITY COMPANY**

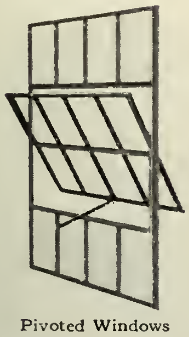
WRITE PRACTICALLY EVERY FORM OF INSURANCE EXCEPT LIFE

***If you do not know his name look under "Hartford" in your telephone book. If he isn't listed write the Hartford Fire Insurance Company, Hartford, Connecticut.**

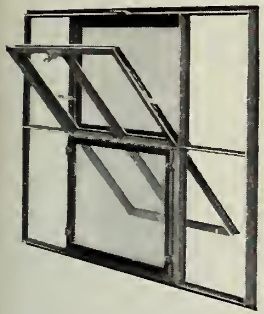
United States Appraisers Stores, New York City. Archts. Buchman & Kahn, New York City. Builders—Shrodder & Koppel, New York City.

Wilshire Tower Bldg., Los Angeles, Calif. Gilbert Stanley Underwood, Archt., Los Angeles; H. W. Baum Construction Co., Contrs., Los Angeles.

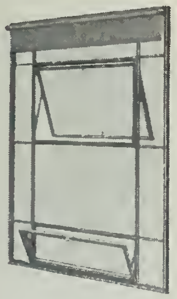
Montgomery Ward Co., Ft Worth, Texas. W H.McCaully, Engr. Thomas S. Byrne, Contractor.



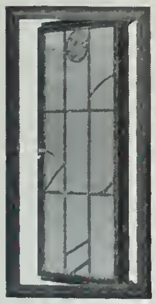
Pivoted Windows



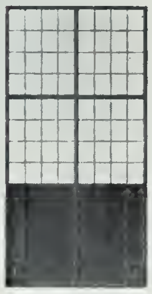
Pivoted Windows Screened



Projected Windows Architectural



Casement Windows



Airport Doors

WHEN *only the best* WILL DO...

Bayley Steel Windows and Doors are invariably chosen

PERSISTENT striving for the best . . . for new features of design . . . for improved products—this has been the policy of Bayley for forty-nine years . . . a policy that has won the confidence of owners and architects and given Bayley products nation-wide approval and acceptance.

Manufacturing metal architectural products, both structural and ornamental, since 1881 . . . steel windows since 1909 . . . and steel doors since 1910 . . . and pursuing, on a large scale, research and development work to improve design and construction — this combination has given Bayley an enviable background of engineering knowledge and skill.

Adequate resources, both financial and manufacturing, and a personnel trained to think, plan and work to a single purpose — these factors have enabled Bayley to offer not only products designed for utility and durability . . . yet harmonizing completely with the best architecture . . . but also a service that is unusual.

Bayley's forty-nine years of engineering experience are available without cost or obligation. Illustrated folders on doors or windows sent on request. . . . The William Bayley Company, 148 North Street, Springfield, Ohio.

District Offices
NEW YORK
67 W. 44th St.
BOSTON
5 Park St.
CHICAGO
75 E. Wacker Drive
CLEVELAND
449 Terminal Tower

BAYLEY
STEEL WINDOWS & DOORS
Sales Agencies also in Principal Cities

District Offices
WASHINGTON
1427 I St., N. W.
ATLANTA
407 Bona Allen Bldg.
SPRINGFIELD, O.
North St.

Transactions

[*Continued from page 94*]

BIG CONTAINER MERGER

Who.—Container Corporation of America, one of the largest paper board companies in the U. S., owning twelve factories, six mills with a capacity of 1,200 tons of box board daily, employing 3,350 workers, showing a decrease in net income of $172,677 for 1929 under 1928 and a 30 per cent increase in sales, aggressive in its policy.

What.—Announced through its president, Walter P. Paepcke, the closing of negotiations for the acquisition of the assets of the Sefton Manufacturing Corporation, makers of folding boxes, and its subsidiary, Dixon Board Mills, Inc. The combined assets of the Container Corporation of America and its two new subsidiaries on January 1, 1930, exceeded $30,000,000.

Why.—Because overproduction in the paper board industries is so great and cutthroat competition so keen that leading companies realize that to make profits they must amalgamate. This is the first of important secretly planned amalgamations. Three years ago unsuccessful attempts were made to organize the industry.

Silver Market Said to Be "Cornered"

Who.—The three great silver exchanges of the world: Calcutta, Bombay, and London.

What.—Reacted on reports that Chimanram Motilal, Indian bazaar owner, had cornered Bombay's market by buying 2,000,000 ounces for immediate, 5,000,000 ounces for future delivery.

Why.—Two basic conditions have combined to produce a crisis. One of them is overproduction: the 260,000,000 ounces (estimated) of silver produced in 1929 tops all records. A drastically reduced demand is the other bearish factor. The greatest use of silver has always been for money. Recently India, which formerly took 30 per cent of the world's output, has been put on a gold basis; and the same change seems imminent in China, the last stronghold of silver money. Thus it is not surprising that the price of silver has never before in history (records have been kept since 1250 A.D.) been so low as now.

GENERAL MOTORS BUYS UP STOCK TO SHARE PROFIT

Who.—General Motors Corporation, largest earning corporation in the world.

What.—Bought 1,000,000 shares of General Motors common stock at a cost of about $35,000,000 to form the Second Managers Securities Company, successor to the Managers Securities Company, formed in 1923.

Why.—Eighty executives owned an initial $5,000,000 in the old company. The new company will bring twice that number into partnership with the corporation.

LOAN FOR SIEMENS ON MARKET TODAY

Who.—Siemens & Halske A. G., rival of A. E. G. (Allgemeine Elektricitaets-Gesellschaft) in Germany's electrical industry, and largest electrical equipment company in Europe.

What.—Borrowed (through Dillon, Read) $14,000,000 in debenture bonds, from the U. S. public for a term of 1,000 years. General Electric (which owns 30 per cent of A. E. G. stock) will own a large block. The thousand-year maturity makes the bond practically perpetual. Bond perpetuity is not unprecedented. Many a British Railroad issue, British Government consols, and an issue of the Canadian Pacific have no maturity date. Elmira & Williamsport R. R. Co. (Penn system) has a 999-year bond issue.

Why.—"To strengthen its finances for future tasks." Siemens & Halske, founded in 1847, now employs 139,000, has vast factories in Germany at Berlin and Nuremberg, outside of Germany at Vienna, Bratislava, Prague, Milan, and Cornella (Spain).

[*Continued on page 126*]

DUPONT

Du Pont Victoria Cabriolet · · Straight Eight Motor · · 140 Horse Power · · Individual Coachwork

A DU PONT OFFERING TO DISCRIMINATING MOTORISTS

dP DUPONT

DU PONT MOTORS, Incorporated, WILMINGTON, DELAWARE

NEW YORK *502 Park Avenue* · PHILADELPHIA *901 North Broad Street* · BALTIMORE *10 West Eager Street* · LOS ANGELES *3733 Wilshire Boulevard*

THE SYMBOL *of* INSULATION EFFICIENCY

FROM every corner of America have come enthusiastic receptions of Weatherwood!★ . . . *the only insulating board fabricated from hardwood.* And already the Weathercock . . . *symbol of insulation efficiency* . . is a recognized value mark and buying guide throughout the nation.

Weatherwood! *It insulates against unfriendly weather,* winter and summer. It is *all wood* . . . strong *hardwood* fibers made into sturdy, full half-inch insulating boards. Weatherwood Lath! . . . perfected insulating plaster base, with the exclusive tongue and groove joint that protects the plaster finish. The Weathercock identifies this superior board and lath. It also identifies the selected lumber dealers who sell it . . . dealers who are sincerely interested in giving you *higher* insulating value and *greater* structural strength . . . for new houses and modernizing old homes. Ask your lumber dealer about Weatherwood, or write for sample and booklet, "The *New* Standard of Home Construction." Write for it today.

CHICAGO MILL AND LUMBER CORPORATION
111 WEST WASHINGTON STREET
CHICAGO · · · · ILLINOIS

Weatherwood

INSULATES AGAINST UNFRIENDLY WEATHER

★ Weatherwood is manufactured and marketed exclusively by the Chicago Mill and Lumber Corporation. This company, with its vast research and strong financial resources, has been engaged in the production and distribution of lumber products, wood packages and commercial veneers since 1881—almost 50 years. Its resources include tremendous acreage of hardwood in the states of Louisiana, Arkansas, Mississippi, and North Carolina, sufficient to insure a perpetual supply of raw material for Weatherwood, strategically located for economical and quick distribution. Together with its associated companies, it enjoys an annual business in excess of thirty million dollars. Over fifty-seven thousand freight cars were utilized last year to fill the transportation requirements of this business.

THE WORLD'S MOST FAMOUS
(*and most imitated*)
PREPARATION FOR THE HAIR

ED. PINAUD
EAU DE QUININE

Thick, luxuriant, dandruff-free hair . . . a scalp tingling with healthy vitality—this unique French compound worked out by Monsieur Edouard Pinaud some eighty years ago, is promoting both of these throughout the world today.

And no matter where you go you can find imitations of it on sale . . . imitations made without even the faintest idea of what the Pinaud formula really is . . . imitations whose makers know only that somehow the Pinaud formula does do marvelous things for the hair—and that almost any kind of concoction can be marketed (for a while, at least) if put up in a similar bottle with a label that looks something like Pinaud's Eau de Quinine.

That is why it will pay you to look for the name Pinaud when you buy Eau de Quinine—for just as imitators cannot copy the Pinaud formula, they *dare* not copy the Pinaud name.

For 150 years the House of Pinaud has been proud to offer the world just such products as this—products perfected often after decades of effort, with a superb disregard of time, of cost. Look for them at your favorite drug or department store.

Pinaud
PARIS · NEW YORK

© Pinaud, Inc., 1930

Transactions

[*Continued from page 124*]

Du Pont Group Invades Field Of Natural Gas

Who.—Directors of Missouri-Kansas Pipe Line Co., purveyors of natural gas to towns in Texas, Missouri, and Kansas.

What.—Elected Francis I. du Pont to their board, verifying reports that the du Ponts are financially interested in the natural gas industry. Chemically the same as "marsh gas," which rises at night from stagnant pools, methane (natural) gas is found in usable quantities by drilling near oil wells. Fifty years ago these wells, considered devil holes, were conscientiously set afire. Within the last ten years, the use of natural gas as a fuel has increased 104 per cent. Two billion dollars are invested in the industry, and 80,000 miles of gas pipes lead out of U. S. oil fields. Missouri-Kansas controls 250,000,000 cubic feet of gas, has laid 675 miles of pipe, plans 1,000 more miles in Oklahoma.

Why.—Du Ponts, alert since 1802 to all scientific-industrial developments, began in 1928 to invest in Missouri-Kansas, stamped their approval last month in the words of Francis I. du Pont: "I am well satisfied with the business done in the past, as well as with the company's plans for the future."

TAXICAB AWARD SHIFTED.

Paramount Replaces Yellow at the Pennsylvania Station.

Who.—The Yellow Taxi Corporation of N. Y., annual lessees of the Pennsylvania terminal cab concession.

What.—Voluntarily withdrew its service from that point, to be succeeded by the Terminal Cab group, recently affiliated with General Motors in the cab field, popularizing Paramount and General cabs.

Why.—The concession price, lowered at Yellow's intervention two or three years ago, was reputed to have been raised. The franchise business, calling for a minimum of 750 available cabs and providing the U. S. greatest daily trip total (between 6,000 and 8,000 calls), gives proportionately small returns. The average trip is short, nets 40 cents.

"SEELBACH" IN LOUISVILLE SOLD BY CHICAGOANS

Who.—Liebling Realty Company of Chicago.

What.—Sold to the Eppley Hotels Co. of Omaha, the famous Seelbach Hotel in Louisville.

Why.—To extend the Eppley chain, to modernize to the extent of $500,000 Louisville's historic, ten-story, 420-room, downtown hostelry.

RETAIL GROUPS IN FURNITURE FIELD COMBINE

Who.—Hugh A. Murrill, president of the Furniture Associates, Inc.

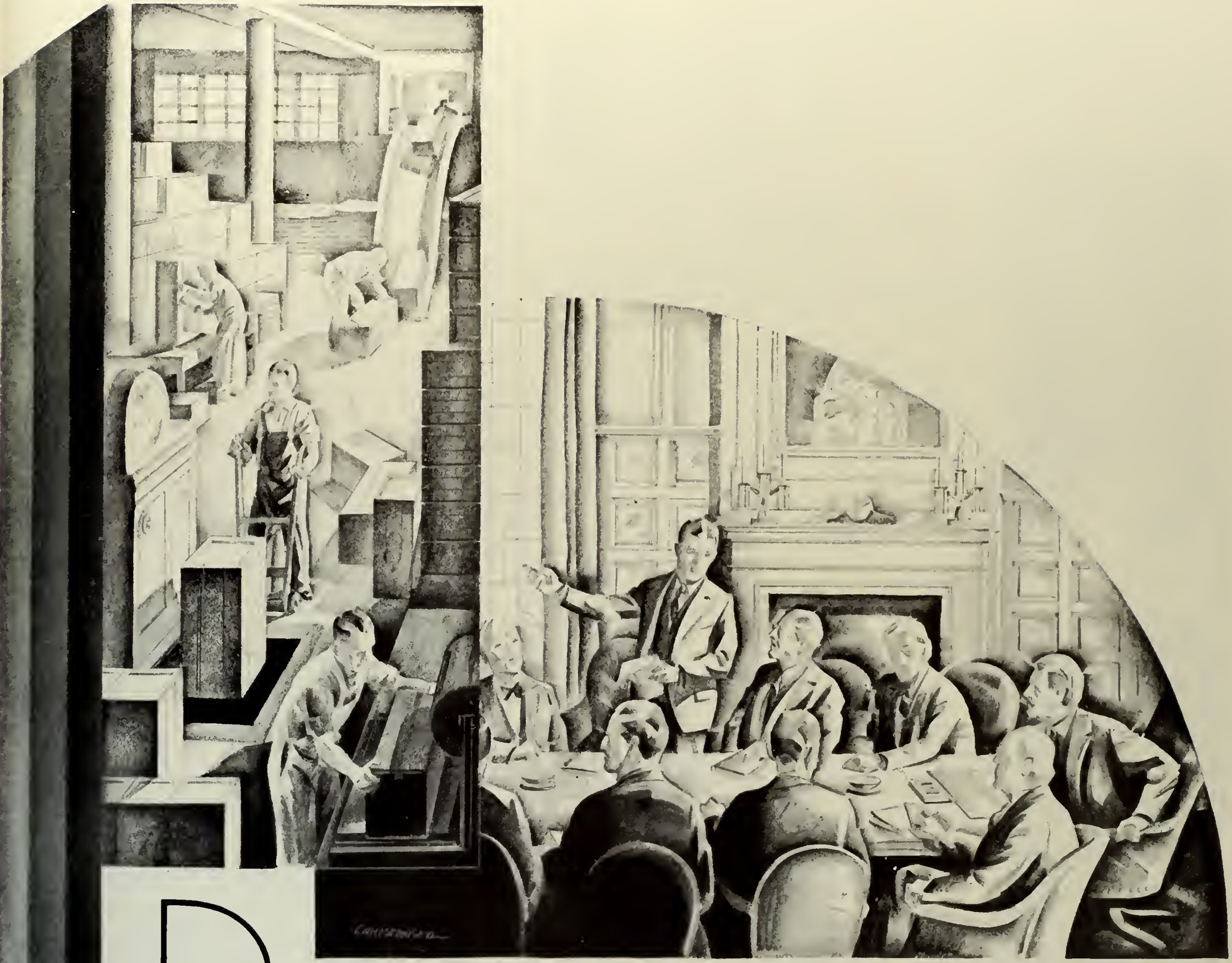
What.—Announced at the American Furniture Mart in Chicago the formation of his company by the merging of the Furniture Associates, Inc., of Charlotte, N. C., and the Century Furniture Associates, Inc., of Oil City, Pennsylvania. The new $20,000,000 organization will be the largest single unit of retail chain furniture stores in the U. S., will spend $1,000,000 this year in newspaper advertising.

COAL OUTLETS SOLD TO VAN SWERINGENS

Who.—The railroading Brothers Van Sweringen of Cleveland.

What.—Organized the Pittston Company, a coal distributing system to cover New York, Hoboken, Boston, and environs, consolidating the United States Distributing Corporation, Stephens Fuel Company, Inc., Owens & Company, F. J Kerner Coal Co., Inc., and Prospect Coal Company.

Why.—To provide the Erie Railroad properties with distributing outlets, to avoid conflict with the recent I. C. C. ruling prohibiting trucking by railroads in Manhattan.



DIVIDENDS

MANUFACTURING profits, with which to pay dividends, are wrung today from improved methods that originate in stop-watch attention to details in every department of business.... Concerns that loom large in industry, after working with General Box Engineers, have found their shipping rooms to be mines of profits in the form of savings.... The satisfactory box or crate today must be specially and carefully designed to deliver its particular load in good condition *at the minimum of total cost.* What General Box Engineers have saved for hundreds of manufacturers they likely can save proportionately for you. Their services and the use of our two box laboratories (one East, one Middle West) are offered to you cheerfully. We invite you to consider your own shipping problems with us.

GENERAL BOX COMPANY

44 WEST ILLINOIS STREET • CHICAGO ILLINOIS

One Service
Nation Wide

A GREAT NUMBER of business firms today are using the finest letterhead they can buy—as an investment in prestige—for important correspondence ... An increasing proportion of them hold that *any* letter going out over the firm's signature comes under this head.

Crane's Bond is a 100% new white rag paper. Its outstanding quality and distinction makes it a valuable asset in building prestige and good will. And its extra cost is so slight as to be hardly worth consideration.

CRANE'S
BOND

for letterheads and envelopes

CRANE & CO., Inc. · DALTON, MASSACHUSETTS

HD

Fortune

A Letter, An Editorial

Among many letters and editorials concerning FORTUNE, two have unique interest:

1. *A letter from Owen D. Young, who has been voted by students of the Harvard Business School "the one outstanding American businessman."*
2. *An editorial in the Daily Princetonian written by one who has yet to begin his business career.*

The Letter—

I am so overwhelmed by the first number of FORTUNE that I scarcely know that to say. So far as I know, only art and sports have heretofore developed a magazine of such beauty and distinction. Such "books-in-parts," as Alkens, and various art publications about that time and later, were supported by a small percentage of the population in England, known as the aristocracy, lifted on the shoulders of the rest.

Now FORTUNE appears to give its fascinating picture of the beauty and power of business. What does that mean? Perhaps it means that the all-embracing term "business" may be drawing to itself the fine spirit of sportsmanship and the beauty of the arts. Then too, the magazine will not be the spokesman of the few lifted on the shoulders of the many, but will reflect this great coöperative effort known as business which is every day learning that its highest success can only be attained, by making everybody healthy, wealthy and wise.

I congratulate you on the initial number of this great adventure.

New York City — OWEN D. YOUNG

The Editorial—

Big Business, Advertising, The Machine might, any one of them, be chosen to characterize these expansive times in which we live. For the first time, a business man sits in the White House; he is surrounded by business men, his assistants and counselors; eminent financiers and industrial leaders cross continents and sail the seas to represent him. Business is the life-blood, the very soul, of American civilization.

There has just been issued the first copy of a new monthly which purposes "to be the log-book, the critical history, the elaborately illustrated record of Twentieth Century Industrial Civilization," to fulfill "the greatest journalistic assignment in history." *Fortune*, although heralded with extravagant superlatives, has not disappointed us; on the contrary, we are amazed and delighted with the first copy. Its physical bulk (three pounds, 184 pages) is astounding, but far from being clumsy, it incredibly has grace and delicacy in profusion.

Like Pallas Athene, *Fortune* sprang fully armed from the brain of its creator *Time*. It shares that indispensable weekly's incalculable facility for ferreting out the elusive but significant facts and for presenting them in a brilliant, energetic style. It is not concerned with market tips, or even less with stock fluctuations. These are, as many a hard-bitten American is realizing, absurd and capricious surface manifestations which have small direct contact with the placid depths of business.

Fortune is lavish in color and photography and far outdistances, in its first issue, any other magazines in its pretensions to being "the most beautiful." It is the very genius of advertising, orchestrating in a tremendous symphony the varied strains of "the oldest of the arts and the newest of professions."

Vivat, floreat, crescat Fortuna.

A few copies of Vol 1, No. 1 (February, 1930) remain. These will be sent to new subscribers in order of application. The subscription price is $10 a year.

Address subscription orders to FORTUNE,
350 East 22nd Street, Chicago, Ill.

TIME, I*nc.*, *Publishers of* FORTUNE
and TIME, *The Weekly Newsmagazine*

...only 10¢

...how can it cost so little?

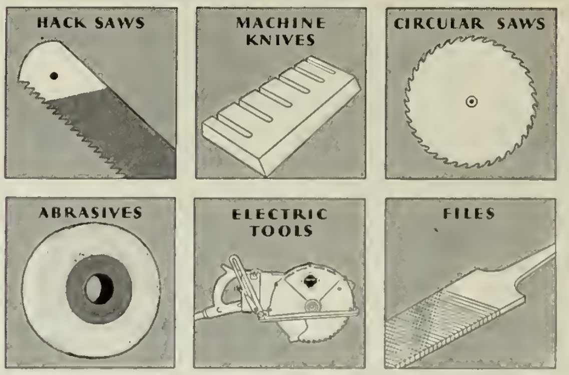
Simonds cutting edges and modern methods guarantee greatest value

NOWADAYS you can step into almost any store and buy dozens of articles that cost so little yet serve so well. Quantity production methods coupled with Simonds products guarantee to manufacturer and to user the utmost in merchandise value.

It has been the privilege of Simonds Industries to work with hundreds of manufacturers in developing cutting edges indispensable to modern quantity production. Operations that once took hours now take minutes—and production costs have been reduced proportionately.

For every material that must be cut and finished—wood, steel, iron, brass, fibre, the new alloys and the modern products of chemical science—Simonds has perfected cutting tools which defy the toughest cutting jobs. Because of their high dependable quality, Simonds cutting edges lower costs... simplify and help standardize factory operations.

Eight Simonds factories, a steel mill, 15 sales branches and a nationally distributed system of service stations await your call to serve.



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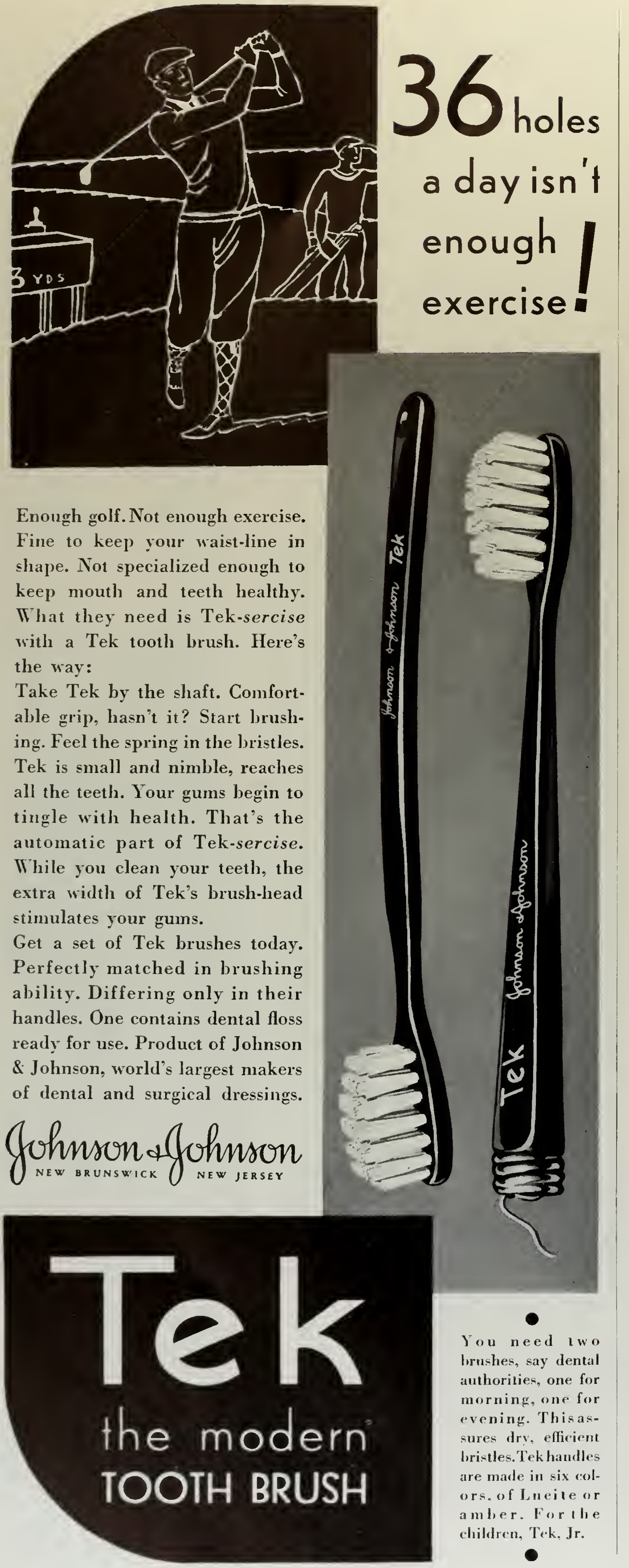

36 holes a day isn't enough exercise!

Enough golf. Not enough exercise. Fine to keep your waist-line in shape. Not specialized enough to keep mouth and teeth healthy. What they need is Tek-*sercise* with a Tek tooth brush. Here's the way:

Take Tek by the shaft. Comfortable grip, hasn't it? Start brushing. Feel the spring in the bristles. Tek is small and nimble, reaches all the teeth. Your gums begin to tingle with health. That's the automatic part of Tek-*sercise*. While you clean your teeth, the extra width of Tek's brush-head stimulates your gums.

Get a set of Tek brushes today. Perfectly matched in brushing ability. Differing only in their handles. One contains dental floss ready for use. Product of Johnson & Johnson, world's largest makers of dental and surgical dressings.

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Tek
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TOOTH BRUSH

You need two brushes, say dental authorities, one for morning, one for evening. This assures dry, efficient bristles. Tek handles are made in six colors, of Lucite or amber. For the children, Tek, Jr.

Diamond v. Emerald, Ruby & Sapphire

[*Continued from page 51*]

Consideration of the corundums is complicated by the fact that it is in these stones that star formations (asterisms) frequently appear. This phenomenon of a star-shaped radiance on the surface of a stone is produced by light refractions from a minute system of hollow tubes running at an angle to its axis. The stars vary in intensity and perfection of form. At their best they lend a special beauty to stones which may be greatly desirable according to taste. But between fine starred and fine plain corundum there is, on the average, little if any difference in price. Asterism is popularly considered a variation rather than a superiority.

The diamond

An examination of the diamond provides the crux of the discussion. In one respect it is unquestionably more desirable than any other stone—it is the most durable of them all. However dangerous and exacting its beauty may be, however ritualistic rather than considered its popularity, it is as nearly as any substance a permanent buy. Whereas diamonds are to be found in many colors—black, yellow, orange, green, brown, blue, flame, and eight recognized shades of off-color "byes"—fashion accords its favor only to the pure white and blue-white stones. Nor is this due to the fact that certain colored diamonds are not costly and desirable. Quite the contrary—splendid samples of red, blue, and green diamonds are so rare that the discovery of one is an event even in a sphere of rarities, and its price is, accordingly, prodigious. These few illustrious gems can in no sense constitute a commodity, hence the public must forego them for blue-white and white diamonds, just as all but the wealthiest collectors of paintings forego the pleasure of owning a Velasquez or a Raphael. We may thus omit these amazing jewels from our consideration.

The gem fancier will probaly obtain much less pleasure from a big, white, flawless diamond than he will from a similarly fine specimen of the ruby, emerald, or sapphire, regardless of comparative costs. Why? In the first place, white diamonds are plentiful, big diamonds are a commonplace, perfect diamonds are not hard to seek and a combination of these attributes of fine color, large size, and perfection of texture is by no means the rarity in diamonds that it is in the other stones. Second, and most important of all, is the fancier's acute realization of a situation of which few diamond owners are aware—the entirely artificial control of diamond prices. Were it not for the shrewd activities of a trust which makes Colombia's control of emeralds seem like a pygmy venture, diamonds would, figuratively, cascade all over the world and their prices would tumble until the sapphire, generally the cheapest of the "precious" quartet, became a relatively prohibitive stone.

The operations of this trust are too private to permit of statistical analysis, but a description of diamond sources in some measure explains its operation and gives an idea of its magnitude.

The Golconda mines of India, whence came such apocalyptic gems as the Kohinoor, the Regent, and the Great Mogul, have long since been exhausted craters. Minas Geraes in Brazil had a magnificent yield in the 18th century but today produce largely inferior yellowish "byes" and black industrial carbonado. During one period the natives of Borneo went Bradyesque with diamond-buttoned coats, so plentiful were the gems, but the current Bornean product is "melée" (under one-sixth carat) and flame-gold in color.

The syndicate

The diamonds that adorn the windows of the best jewelers and bring the highest prices in world-wide markets are mined almost entirely in South Africa. The great mining town of Kimberley rests above a vast underground volcanic system of mud, vestige of a prehistoric lake, which contains tons of "blue ground" or kimberlite, shot with diamonds. Here, where the British outnumbered the Boers, four great mining companies coöperate for mutual benefit under the name of the Diamond Syndicate. De Beers is the oldest and largest. The ground controlled by Premier produces the most flawless diamonds. Southwest Protectorate (British and American capital) and Jagersfontein, least extensive of the four, make up the list. They all began in the seventies after a small Dutch boy had picked up a fragment of stone (1867) which surprised and delighted one of his elders. The history of the Syndicate includes numerous crises when competition threatened from the Congo, Namaqualand, and odd spots in the Transvaal. Inferior but abundant diamonds had to be bought by the Syndicate from smaller firms. Finally the South African Government, in one stroke, rendered the Syndicate practically impregnable and itself opulent. Observing that independent, competing prospectors paid very small taxes and that the Syndicate's taxes were correspondingly large, the Government decided in favor of the latter, with the result that in 1926 a law was passed prohibiting further independent prospecting, confirming the holdings of the Syndicate, and securing for the Government an exceedingly large percentage of the income from all South African diamonds. Except for the government-operated Namaqualand fields, the Syndicate is now almost alone in its enterprise. All in all, South Africa furnishes the world with at least 90 per cent of its diamonds and exercises its virtual monopoly to tremendous effect.

The price

Jewel cutters in world-wide cities (Amsterdam, Antwerp, and New York are the centers) inspect and take options on made-up packages of stones sent from the mines. Their quality varies; some develop well, a few are flawed or broken in the cutting. The cutters price their finished product with due regard for the waste material. This is no small amount, since stones may be completely ruined in cutting and good cutters are rarely able to preserve more than 40 per cent of a rough stone in a single finished product. The retailer raises the price again, and his profit is a very considerable factor in the final cost to the consumer. This is necessarily so because he handles the most expensive property units in the world, the number of units is comparatively few, and the overhead expense is comparatively great with considerable chance for loss on the investment. His rate of stock turnover is sometimes as low as nine tenths a year. His advertising—averaging 3.4 per cent of sales—is higher than most, except that for women's wear. His rental averages 5 per cent higher than that of other retailers; the jeweler must maintain a stonily impressive establishment in keeping with the quality of his merchandise.

Thus anyone who buys any gem necessarily pays the miner, the cutter, the setter, and the retailer. But he who purchases diamonds not only supports these gentlemen, but obtains in return an artificially maintained rarity at an artificially maintained price. Purchasers might logically be expected to bridle at the thought that South Africa keeps the strings tightly drawn on bag after bag of reserve stones. But since most persons buy these gems with a social rather than esthetic attitude (a fiancée, a bride, a matron must have the "proper" diamonds), the demand continues, and since the Syndicate is safe as the South African Government and the Government seems reasonably secure, there is little likelihood, short of the discovery of new and vast diamond fields, that diamond prices will fall. Indeed, if it is wary and judicious, the Syndicate may bring about a gradual increase. On the other hand, if it should, of a sudden, loose upon the world a price-lowering shower of diamonds, the Syndicate might argue that it would be depriving the world of what it wishes to believe *is* a rarity and, therefore, desires. Cabell, one remembers, remarked *mundus vult decepi* (the world wishes to be deceived). In ultimate consideration, perhaps the Syndicate is merely catering to that human desire. The world wishes diamonds were a rarity. The Syndicate makes them so. Further it provides a modicum of happiness by supplying them to those who can afford the high price of rarities. Thus, perhaps, are both consumer and Syndicate enriched.

Safer than sables

The jeweler, on the other hand, argues that diamonds are not only beautiful but a sound investment. The South African fields might go the way of others, and diamonds rise to unheard prices. True, new fields might be discovered in China, Siberia, Brazil. But today, he would argue, the value of the stone itself is as safe as anything in this precarious age. A much safer investment, he might add to a customer, than a sable coat.

The gem fancier, however, attentive to true rarity, true desirability, may be pardoned if he scoffs at the cost of diamonds as the result of one of the most colossal inflations in the history of commerce. To him it may well seem that the "inestimable stones, unvalued jewels" are the colored gems, more variegated and far less supercilious in their beauties than the diamond, capricious and elusive prizes which are worth the chase, more exciting to pursue and to possess.

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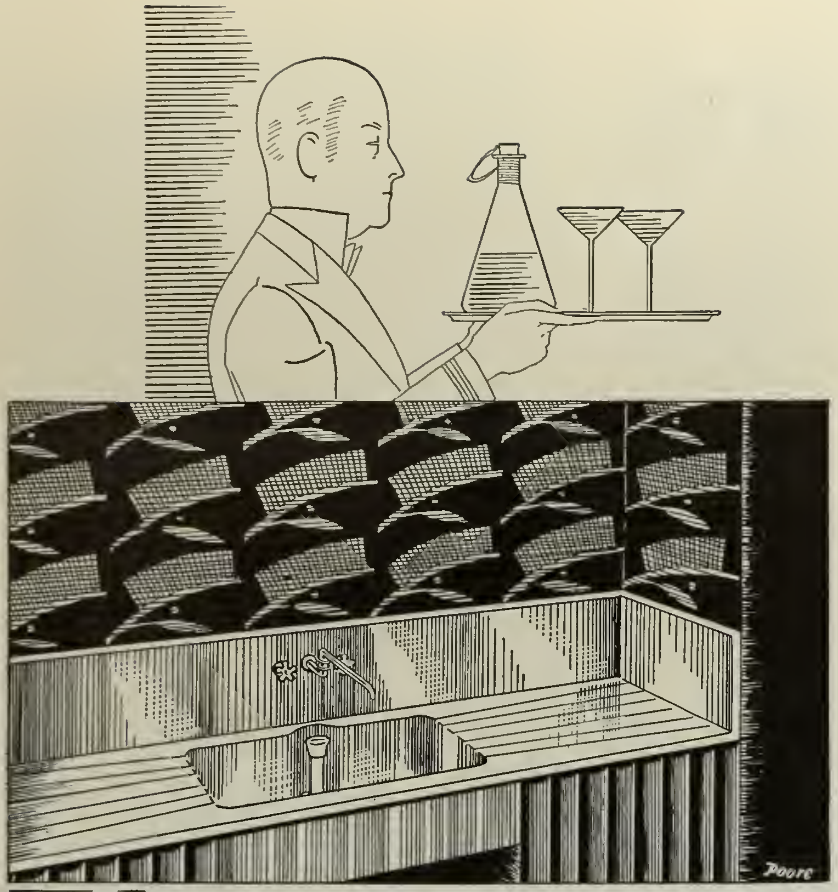

THROUGHOUT THE AGES, dining has been considered by cultured people as rather an event —a most important factor in the joy of living. But however amiable the company...however well provided the festive board...no dinner is a real success if the service is perfunctory. ● The purpose of the new Butler's Pantry Sinks by Elkay is to so facilitate the preparation of fine dishes that your service may have the promptness and efficiency that marks a well conducted dinner. ● A request to the Elkay Manufacturing Company for Catalog F-3 will bring you a descriptive brochure.

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Aluminum Company of America

[*Continued from page 71*]

lightness. Even the person least conscious of physics and least concerned with the formula that energy equals mass times the square of velocity can appreciate aluminum when energy is the muscle power of the rider, mass is the weight of the rider, and velocity is the speed that the exertion of muscle power produces. When the bicycle vogue vanished, only to be succeeded by the rise of the automobile, aluminum interests decided that the millennium had arrived and prepared to enlarge factories and increase production.

Unfortunately, however, the all-aluminum automobile was an illusion. There were many aluminum bodies used in early automotive days, and there never was any question but that the aluminum car was superior to the steel car in that it consumed less gasoline, wore out fewer tires, and lasted much longer. But as soon as the automobile went into mass production, as soon as it became a real factory job with price a deciding sales factor, costly aluminum yielded to less costly steel. On the Continent (where cars are taxed partly on their weight, and where the automobile owner expects to drive his car for ten or twelve years instead of knocking the gloss off and trading it in) the aluminum body is well established, but in this country it is to steel, not to aluminum, that the automobile has turned. Yet although the complete aluminum automobile proved a disappointment, aluminum did find a tremendous field in automobile parts. In pistons, for instance, both lightness and heat conductivity made aluminum an ideal metal, and the general automotive field today constitutes aluminum's largest single use.

From 1912 on, and especially during and after the War, aluminum made rapid progress, particularly through the development of high-strength alloys. Aluminum is correctly thought of as soft and easily bent, but heat-treated aluminum alloys (chiefly with copper) have a tensile strength equal to mild steel. The better airplane propellers are now made almost exclusively of aluminum alloy, although, much to the aluminum people's displeasure, even aviators themselves commonly talk of their steel "props." This confusion results partly from the fact that the Aluminum Company makes propellers in a semifinished form, then sells them to a propeller manufacturer who machines, finishes, and resells the products. Thus one Aluminum Company customer, the Standard Steel Propeller Company (since absorbed by Hamilton Aero Mfg. Co.), sold its aluminum-alloy propeller under the name of the Standard Steel Propeller, a title from which the Aluminum Company officials would gladly have removed the second word. Aluminum alloys are standard for dirigible frames, and one dirigible has recently been built with an aluminum (instead of a fabric) skin.

But although an air-minded public thinks first of aviation when (or if) it thinks of aluminum alloy, it is in the more prosaic land transportation and general industrial fields that these alloys have been most important. Indeed, a discussion of aluminum alloys brings us down to the Aluminum Company of the present, for the greatest contemporary development in aluminum is its application to structural forms. Such objects as channels, girders, I-beams, and other structural shapes have been traditionally sacred first to iron and then to steel. The perfection of heat-treated alloys gave aluminum the required properties for structural employment. It was then necessary to work out standards, specifications, and methods of shop practice for the making of structural aluminum. This tabulation of data was at length accomplished and in November, 1929, the Aluminum Company's works at Massena, in northern New York, went into operation on the making of structural shapes.

The potentialities of structural aluminum are almost fantastic. Railroad tracks, for example, will not stand much heavier loads than they now carry; at least partly aluminized must be the bigger and better trains of the future. Aluminum may lighten some of the load that skyscraper foundations of tomorrow will carry, although at present architectural aluminum is used chiefly in decorative spandrels, copings, and gratings. The navies of the world are extremely interested in aluminum, particularly since naval limitation agreements have put so much emphasis upon the displacement of battleships. A 10,000 ton aluminum cruiser, for instance, would be three times the size of a 10,000 ton steel cruiser. Of

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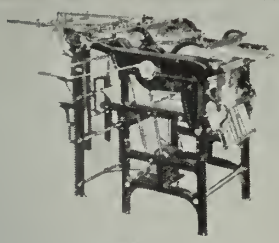
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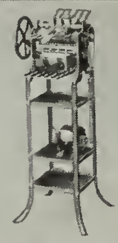
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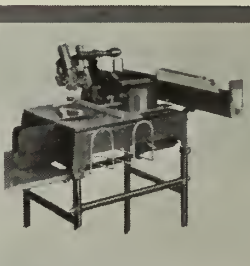
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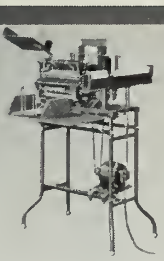
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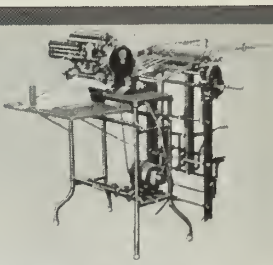
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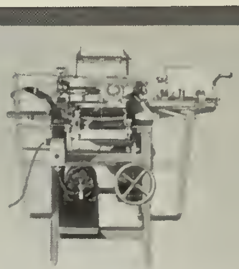
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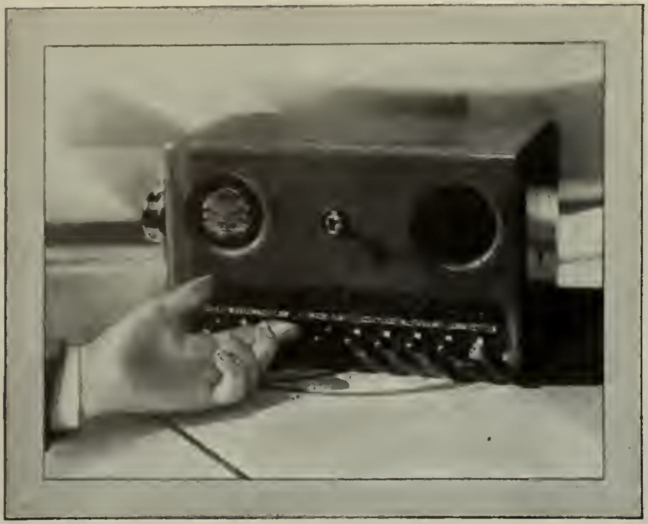

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course, such an all-aluminum cruiser could exist only in the pages of a newspaper Sunday supplement, and equally, of course, the naval limitators would be shocked and pained at what they would consider a tricky and unethical evasion of their limitations. Nevertheless, a specification is a specification and a pound is a pound, and certainly naval engineers are exhibiting an intense interest in the degree to which aluminum may be substituted for steel. Meanwhile, the Aluminum Company expects that in every structural field in which reduction of weight is an important factor (and it is a most important factor in every phase of transportation construction), aluminum structural forms will win a rapid acceptance and build up a gratifying tonnage.

Thus the Aluminum Company today, as in 1888, considers itself and its metal still in the beginning of their careers. Forty years is a brief time in a metal's history, especially in comparison with ancient copper and prehistoric iron. Constantly expanding, the business of the Aluminum Company is also constantly changing in character. As recently as over the three year period from 1926 through 1928 the business of the company (aside from its sales of aluminum to other manufacturers of finished aluminum products) found its greatest tonnage in transportation, especially automotive parts; in cables, particularly high tension lines carrying up to 220,000 volts; and in household products, including washing machines and vacuum cleaners as well as cooking utensils. Other important uses were aluminum-capped and aluminum-sealed bottles (containing everything from ginger ale to whiskey); aluminum foil, used to wrap candy bars, chocolates, food products of all kinds and also in the manufacture of shaving cream and tooth paste tubes; and powder, forming the pigment in aluminum paint, which, noncorrosive and highly reflective, is widely used for all outdoor and many indoor purposes. Aluminum paint is particularly valuable in the oil business as an aluminum-covered oil tank absorbs less of the sun's heat and prevents evaporation.

Tomorrow's development of structural shapes should result in a greatly increased use of aluminum in unit transportation, especially in motor trucks and street cars. The foil business will be tremendously increased if the cigar and cigarette manufacturers adopt aluminum-wrapped products for essential moisture-proofing. Aluminum furniture and architectural aluminum are just getting under way and to the growing aviation business, aluminum is, of course, particularly vital.

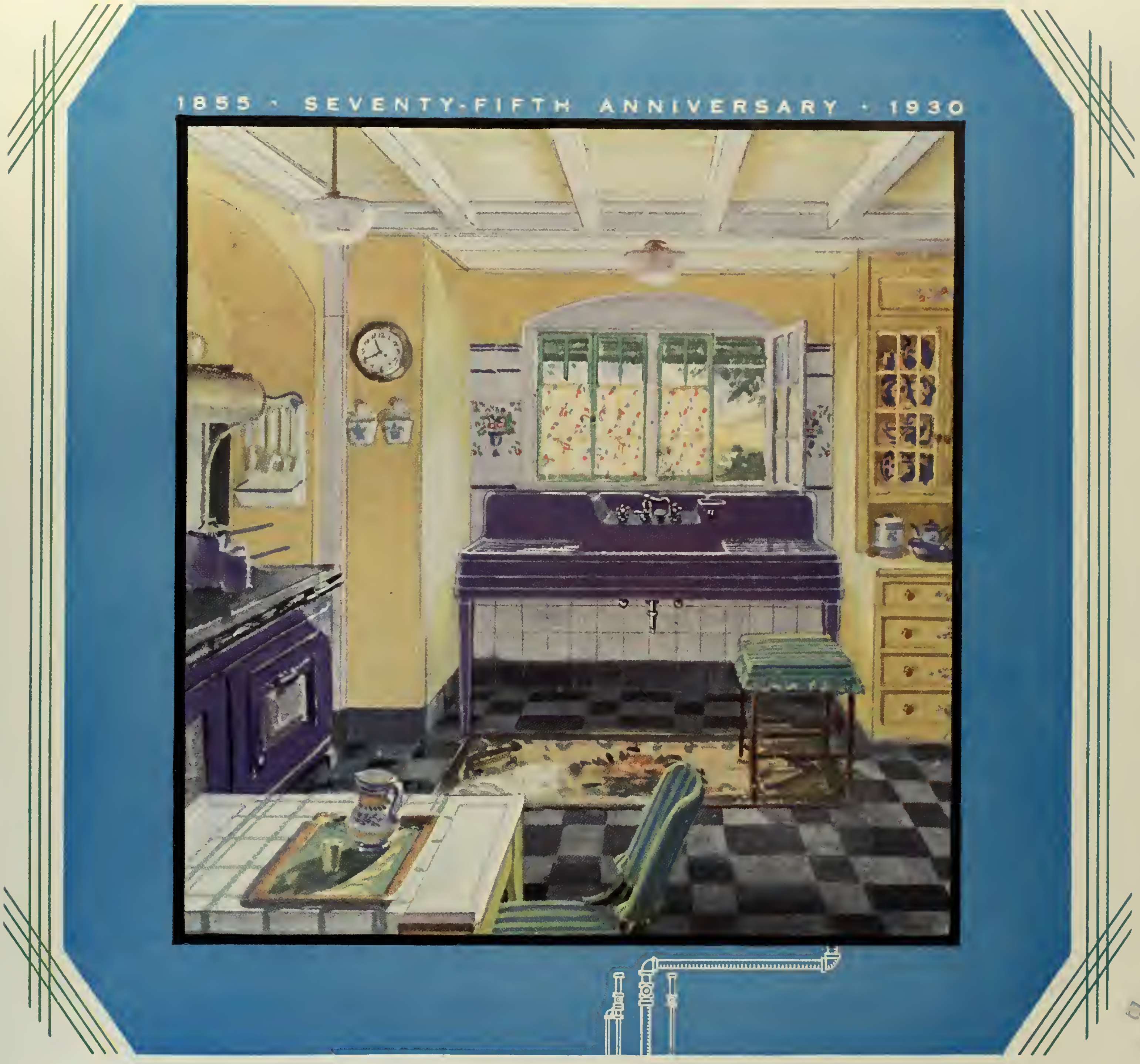
During 1928 the Aluminum Company showed a net income of $19,279,465; in 1929 it probably passed the $20,000,000 mark. In 1928 the domestic production of aluminum as given in *Metal Statistics*, published by the American Metal Market, was 198,414,000 pounds. Official 1929 figures have not been released, but will undoubtedly show an increase.

In considering the earnings of the Aluminum Company, it must be remembered that the total earnings are by no means entirely based on the sale of ingot metal any more than the earnings of the United States Steel Corporation are confined to a profit on ingot steel. Like the Steel Corporation, the Aluminum Company has fabricating mills, railroads, power companies, and other investments, all essential to its aluminum business and all contributing to the earnings. In the very early days of the company the earnings were based on the marketing of ingot aluminum alone. Today its earnings on ingot aluminum are only about one third of the total.

Owing to the company's policy of plowing earnings back into plant and equipment and writing off obsolete equipment, research, and development, the capital investment as of the end of 1928 was a little over $1.25 per pound of aluminum produced, or approximately $273,000,000.

The company currently shows approximately the same net income as its neighbor, the Westinghouse Electric & Manufacturing Company. It is hardly necessary to point out that its future rate of increase should be exceptionally high. Its stock is one which, perhaps more than any other, intrigues investment trusts because of the belief that substantially greater earning power might be shown were write-offs for development and obsolescence less conservative.

Thus the Aluminum Company and thus aluminum. Whether the monopoly indictment will die down with the completion of Mr. Mellon's tenure of office as Secretary of the Treasury is perhaps debatable: for some four years the Federal Trade Commission has been making inquiries concerning the company and its methods, and a Commission report is still awaited, though now, perhaps, not very breathlessly. As far as virgin metal production competition is



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concerned, the company has had no domestic competitors. Shortly before the War, a French company did plan a reduction plant in North Carolina, but the outbreak of the War brought an end to this competitive attempt. There is, however, a European aluminum combination or cartel, controlling a production of nearly 200,000,000 pounds a year. This cartel, however, does not seem to give Aluminum Company officials any great concern. They philosophically admit that overproduction abroad is bound to find the easiest market. A more important aluminum source of competition is the scrap market. As aluminum does not disintegrate, it retains its metal value. Indeed, aluminum scrap at about twelve to eighteen cents a pound, depending on quality, has a higher market value than new steel, and can be remelted and reused with entirely satisfactory results. Aluminum experts maintain that if aluminum were still marketed only for its early uses, the supply of scrap would be equal to the entire demand. To be sure, the Aluminum Company has been accused of attempting to corner the scrap market. This the company denies, and points out that even if it were so shortsighted as to attempt such a corner, the effort would be as impossible as attempting to control any other broad scrap supply.

Meanwhile, it must always be remembered that aluminum is constantly in competition with other metals. Just as aluminum kitchen utensils to some extent superseded tin pans, so now the new stainless steels are competing for the utensil market, although the Aluminum Company feels that aluminum's superior heat conductivity will enable it to hold its position. The aluminum products always face the disadvantage of a higher first cost (an important factor in preventing the Aluminum Company from pricing its pig according to fancy); nor are there many applications of aluminum in which some other substance will not serve with reasonably satisfactory results.

It is perhaps this intermetallic competition which makes the Aluminum Company itself so free from any feeling that it is a monopoly, at least in the invidious sense of the word. Insofar as a corporation may be said to have a personality, the personality of the Aluminum Company is expressed largely in its paternal attitude toward aluminum. The Aluminum Company official does not necessarily sleep on an aluminum bed or sit in an aluminum chair. He does, however, look upon aluminum as a father might regard an only child, which, nursed through a trying infancy, has developed into a sound and healthy adolescence. That the Aluminum Company of America does regard aluminum with a certain prideful air is undeniable. It considers its critics as those who, having had no hand in the building of the temple, are now engaged in carping at the finished structure.

Yet it must be admitted that aluminum has made, in a forty year period, an astounding progress. It must be also admitted that every step in that progress has been taken under the Aluminum Company's sponsorship and guidance. The Aluminum Company has undoubtedly been the laborer in the vineyard—a laborer who now feels himself well worthy of his hire.

Bullfighting, Sport & Industry

[*Continued from page 88*]

the shock of the initial charge of the bull. A general tolerance of infractions of this code exists, however, and this is further complicated by the practice of the *propina* or tip.

Horses and tips

Take the matter of the horses. This is to most Anglo-Saxons the most objectionable part of bullfighting. It is especially objectionable to Americans, always before they have seen a fight and sometimes afterwards as well. Yet most of the horses for the Spanish bull ring are furnished by the United States. The worst, worn out cab horses in Spain will bring $50. So the big horse contractors for the Spanish bull ring buy their horses in St. Louis where western horses can be purchased for as low, sometimes, as $5, ship them to Newport News and bring them to Spain direct, a shipload at a time. The bull ring horse contractor will at the same time buy mules for the Spanish army and I have one friend in the business who, as well as buying horses for the ring, buys polo ponies for the King of Spain. The fact, however, remains that the United States, where opinion

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deplores the use of horses in the bull ring, furnishes some 85 per cent of the horses used.

At various times attempts have been made to do away with the use of horses in the Spanish fights. They have all been unsuccessful. Without going into the technical causes, it is a question of having either horses or men killed. Men are liable to be killed in any event, but they are certain to be killed if horses are not used. The present Queen of Spain is an Englishwoman. When she married Don Alfonso and came to Spain she wanted to see a bullfight—but without horses. It was put on in private with real bulls, and after seven men had been carried to the hospital and the Queen had left the Royal Box, the two bulls still left to be killed were allowed to wait in the corrals to be brought out on another day when horses should be used and the general public admitted.

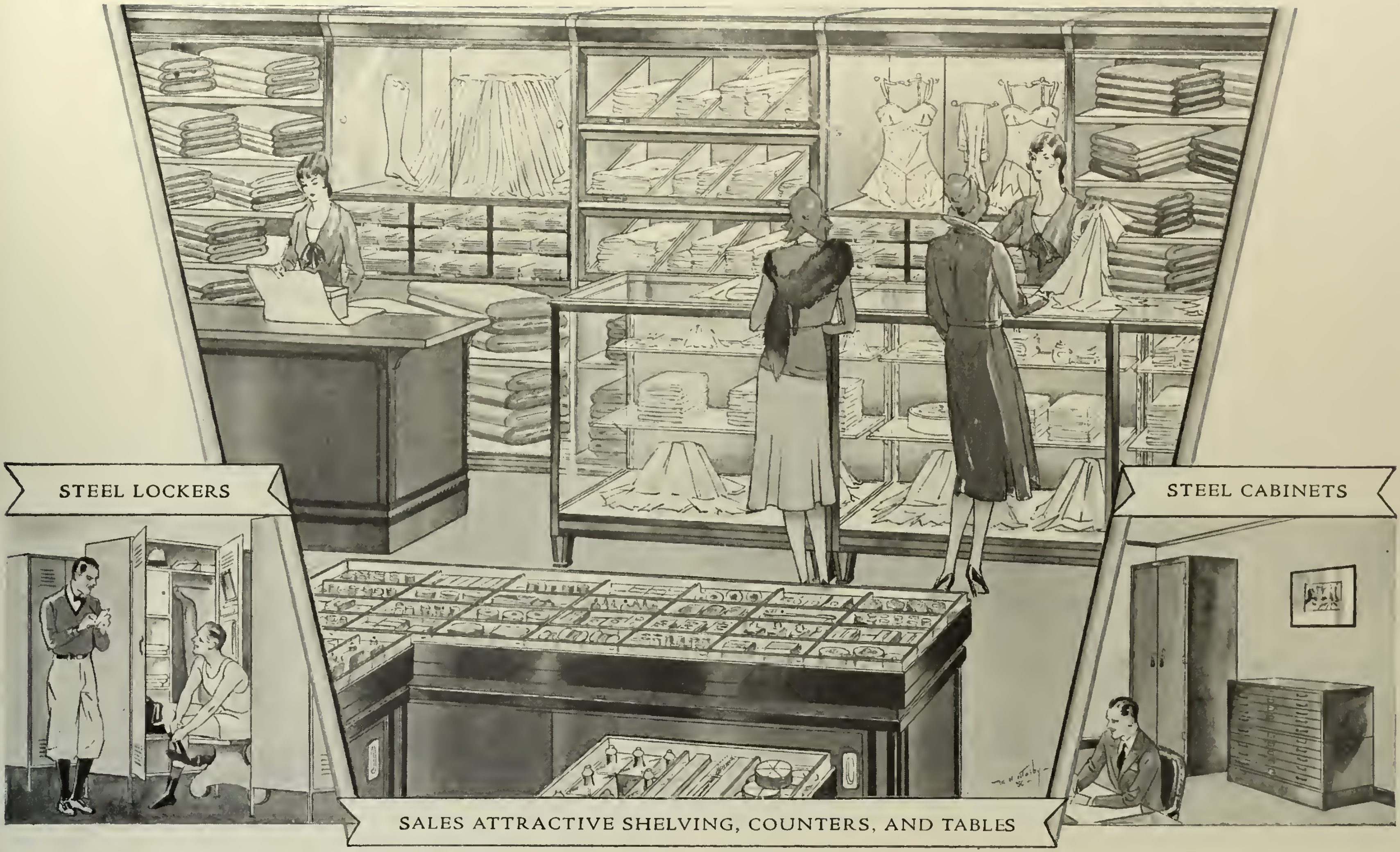
At present horses are protected by a sort of mattress which is hung over their chests, upper forelegs, and bellies. A horse protected by one of these mattresses can be wounded by a bull, but the spectators are spared the sight of the wound. Anyone who has ever been wounded knows that the pain of a wound does not come at once but from half an hour to forty minutes later. In the old days the public could see to what extent the horse was wounded and could, by their protests, force the horse to be killed at once. Now the wound is concealed to be sewn up in the corral. The wearing of the mattress, which was hailed by many people as a step in the humanizing of the bullfight and making it more acceptable to visitors to Spain is, in reality, a great blow against it.

The horse contractor furnishes the horses for a fixed sum—formerly, for a big fight, 2,000 pesetas ($296.60). There were required by law to be six horses on hand in the corrals for each bull which was to be killed. The contractor must have these horses on hand, but it is to his interest that as few of them are killed as possible, also that they should be of the minimum value possible. The horse contractor therefore gives a *propina* to each bull ring servant in order that he will do everything possible to avoid horses being killed, i.e., put out of their misery in the ring. The contractor also gives a tip to the picadors—the men who, of all men who take risks of life and death, are paid the worst, next to the soldiers, of course—in order that the picadors will take additional risks and accept horses which do not comply with the regulations as to height, size, strength, etc. It is to the existence of these tips that most of the visual horrors of the bull ring are due. The picadors, if they were well paid and trained and well mounted on big, solid, strong horses, could protect their mounts from the bull, and the tiring of the bull and the lowering of his head could be accomplished with no more danger to horses than they experience, for instance, in steeplechasing. A really fine picador will sometimes go through an entire afternoon on the same horse and never have his mount touched. The horse contractors have been most responsible for all the sights which have shocked northern people in their first view of a bullfight.

The men who make the money out of bullfighting are not the bull raisers, who are nearly all rich men before they become bull breeders, nor the promoters—last year in Spain out of 115 bull rings that gave major fights there were not a dozen rings that made any considerable money—but the matadors or killers. There are many reasons for this, but the principal one is that the matadors are organized.[5]

The Promoters

The lot of the promoters is very difficult. All bullfights take place in the open air. A serious bullfight in the rain is impossible, and a bullfight without sun is completely unattractive. Therefore the promoters are at the mercy of the weather. Because the bullfighter fills his dates up early in the year and because most bullfights are given on Sundays, legal or religious holidays, and during the months of August and September on the fixed Saints' days of towns, these Saints' days determining the dates of the local fairs, the promoter must sign the bullfighter to a contract at the start of the season. If the bullfighter is injured and cannot appear, the promoter must get a substitute and the substitute may not have the drawing power in gate receipts of one-eighth as much as the original fighter contracted for. Again, the bullfighter may be wounded and on going back to the ring after coming out of the hospital be in bad physical shape, or still under the impression of the goring he has received, and may take no chances at all, do nothing brilliant, and kill the bull how and when he can instead of artistically preparing and killing by the rules. So the promoter is at the mercy of all sorts of accidents. He has bought his bulls from the bull breeder, and perhaps something happens to them: they get hoof and mouth disease,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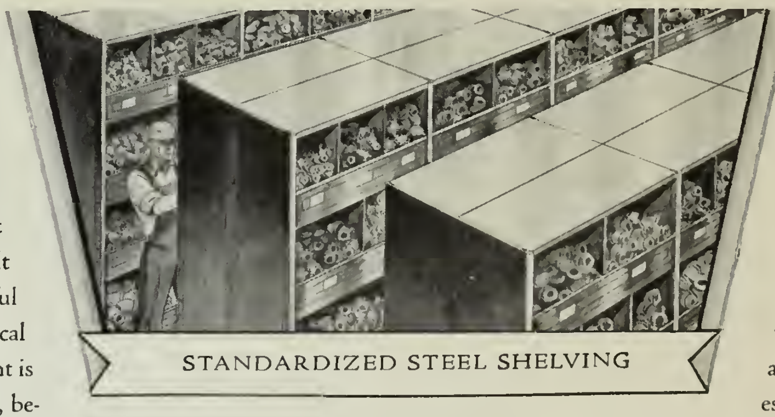
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which was epidemic throughout Andalusia two years ago, and he sees them refused by the veterinary, or they may fight together in the corrals of the bull ring—they frequently do—and at the last minute he has to replace one or two. The promoter is in a bad way, too, because he usually does not own the ring but has to rent it from the municipality. The rings are usually put up for rent by sealed bids every five years or so. If the promoter has rented the ring for 30,000 pesetas a year, as was done at Málaga where the ring made money due to the popularity of two local bullfighters, at the end of five years the promoter may find himself bid up to 90,000 pesetas ($13,347) a year, one of his local fighters dead and the other useless, through fear and high living, as a drawing card, and the promoter himself facing five years of almost certain loss.

The promoters of the bull ring at Valencia, a rich city of over 200,000 people surrounded by the richest farming country in Spain with peasants coming in from the country each day for bullfights during Fair Week, gave eleven bullfights on successive days this last July in a ring which holds 16,851 people. On nine of the eleven days the ring was full. On four days there was not a ticket to be had by the morning of the fight. Two fights which were given with local matadors of the second category, who received less than half of what the first strong matadors were getting, drew only about 10,000 spectators each. Yet at the end of the eleven days of bullfighting, when every day but two the ring had been filled to capacity, the promoters were bankrupt. The reasons for this loss were the price they had been bid up to lease the ring; the exigencies of the matadors, who were popular favorites; and the fact that the most expensive first row seat at a bullfight at Valencia costs less than five dollars. That is all the public will pay for the best seats except at tourist centers like San Sebastián; if prices are raised they stay away.

Bull rings in Spain which make money are Madrid, where there is a big ring, a steady public of bullfight fans, many of whom have their seats subscribed for during the season, and a steady stream of tourists to attend the fights the regulars stay away from; Bilbao, where the seats are also subscribed, where the population has money and where the taxes are almost inexistent because the profits go to the local hospitals and charitable institutions; San Sebastián, where there is a rich summer colony and also Saint Jean de Luz, Biarritz and all the Basque coast to draw tourists from; Pamplona, where, because of the last survival of the old custom of running the bulls through the streets in the early morning, people come from all over Spain to spend bullfighting week and where, also, there is a big ring which is managed and kept tax free by the local poorhouse. These rings with, usually, Barcelona, Seville, Valladolid, Santander, always show a profit. But promoting bullfights in other Spanish cities is a gamble for the individual even though the local municipalities often make a subvention for the fights or fight in order to attract people from the surrounding country to the Fair Week.

Profits of the Matador

The people who get the money are the matadors. Take, for instance Marcial Lalanda who, last year, was the best, the most skillful, the most consistent and the highest paid matador in Spain. In 1924 the bullfight promoters organized to fight the matadors, whose demands were ruining their business, and agreed to blacklist any matador who demanded more than 7,000 pesetas, around $1,000, for killing two bulls. This sum was to include the pay of the matador and his team or *cuadrilla* of three *banderilleros* or cape and dart men and two picadors. These assistants are always paid by the matador and given their traveling expenses out of what he receives for the fight. The attempt to hold down the bullfighters' prices was broken by one man, Ignacio Sanchez Mejias, who demanded 12,000 pesetas for a fight and got it because he was popular, and ended by fighting sixty times that year in defiance of the promoters' organization.

Since then bullfighters' prices have not been controlled in any way by the promoters, and Marcial Lalanda this year gave eighty-six fights at an average price of well over 12,000 pesetas. This would gross him over a million pesetas. The price of the fights varied slightly and the exchange on the peseta also varied during the summer, but it is accurate enough and no exaggeration to say that Marcial Lalanda gave eighty-six fights at an average of $2,000 apiece. That gives him a gross of $172,000 against a gross for the season of $33,000 by the leading bull breeder. The bull ring at Pamplona, for instance, with all expenses paid but no charge made

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Total insurance in force	$395,247,955.00
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Cash surplus . . .	1,951,815.00
Losses paid in 1929	1,143,694.00
Losses paid from organization to January 1, 1930 . . .	13,676,710.00
Dividends paid in 1929	826,001.00
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for depreciation, was said to have netted 200,000 pesetas or some $29,600 on the season, one of the most successful it has ever had. If Marcial Lalanda had wanted to go to Mexico for the winter, where there is an enormous ring and where the seats are sold in dollars, instead of resting after his hard season, he could have fought six times and earned an additional $25,000 net.

Next to Lalanda in point of earnings came Vicente Barrera with 66 fights; Felix Rodriguez with 63; Valencia II, 43; Nino de la Palma, 42; Villalta, 41; Marquez, 37; Chicuelo, 36; etc. All these bullfighters mentioned, except Villalta, lost many fights from horn wounds, and the fights they lost were divided among the other 53 matadors, who fought anywhere from 34 to 2 fights. There were six matadors in Spain last year who had only one fight. None of them received over 4,000 pesetas for their single appearance and it is safe to say that they had to give at least 1,000 of that to their aids and the manager who put them on the program, and the 3,000 pesetas that remain is all the money they made in the year of Our Lord 1929. There were thirty-one bullfighters, that is, officially consecrated bullfighters or *matadors de toros*, who made less than $4,000 last year. So it is not the bullfighters in general who make the money but rather the twenty or so who are in the first flight of their profession.

Out of the 12,500 to 15,000 pesetas ($1,853.75 to $2,224.50) that Marcial Lalanda receives from each fight, he must pay two picadors at 625 pesetas ($92.69) the pair, two *banderilleros* at 300 ($44.49) apiece, and another at 250 pesetas ($37.08). He pays his manager perhaps 250 pesetas ($37.08) for each contract that he signs for him, and this added to the expense of his team makes a total of 1,725 pesetas ($255.82), which he must deduct from the money he receives from each fight. He holds down traveling expenses by making all trips possible by motor car.[6] The bullfighters who in the height of the season must fight, for instance, at Santander one day and at Valencia the next, a train trip of over 40 hours, have been the greatest beneficiaries of the splendid motor roads that are being built all over Spain.

Leaving Santander after the bullfight and driving all night and the next day, the team of bullfighters arrives in Valencia at three o'clock in the afternoon in time to bathe, dress, and rest a short time before the fight. But it is unfair to the public, who pay to see a performance by men at their best rather than tired and stale after an all night motor trip. The bullfighter has one idea: to make all the money he can while he can, because he never knows when an accident, a slip, or an error of judgment may bring him a wound that will incapacitate him or, what is as bad, take away his courage. It takes a bullfighter half a dozen fights after he has been badly wounded to get his confidence back.[7] This has nothing to do with his fundamental courage—no man is a coward who goes into the bull ring—but a brave man may be so badly wounded that he cannot control his reflexes at the approach of the horn. Also when a matador has been badly scared he cannot kill well. He cannot profile in front of the bull's horns, make the bull lower his head to follow the red cloth held in the man's left hand, and, as the man goes in on the bull and the bull charges, put the sword in high up between the bull's shoulders. After he has been wounded, and until he gets his confidence back, he only gives a parody of the final encounter between bull and man. He shoves the sword in any way he can and the crowd throws all available objects at him. After the matador has been wounded, and until he has his nerves back, he does only one thing—avoids the bull's horn; and each day he loses popularity and drawing power. There are new fighters coming up each season and after two or three bad years a bullfighter finds himself without contracts, out of training because he has no chance to keep his judgment of distance and confidence by fighting. Then he has to accept what fights he can get as a substitute, kill the bulls no one else will kill and, being out of practice, if he tries anything brilliant the serious horn wound is nearly inevitable.

Bullfighters start their profession in two ways. If they have economic advantages, they can go to the bull ranches of Salamanca, principally, and learn to handle bulls through practicing on the female calves when they are tested for fighting quality. They will have the aid and counsel of mature bullfighters who will correct their faults and tell them how to do things. In this way they are sometimes made good, artistic, mechanical bullfighters who have a great success when they are working with the young bulls in the *novilladas* or minor bullfights, this success sometimes continuing until they get their first horn wound from a real bull, after which they may lose their courage and usefulness entirely.

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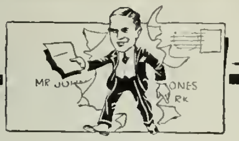

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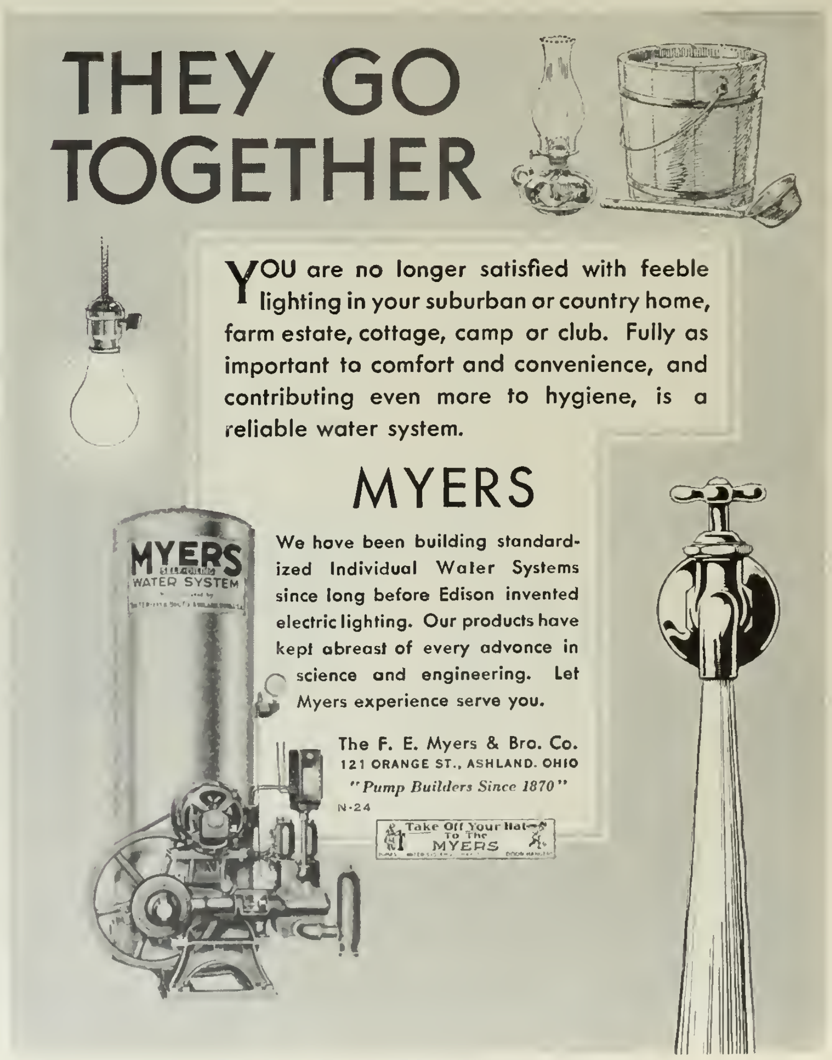
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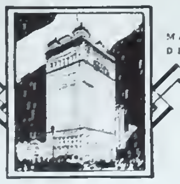
CARL M. SNYDER, MANAGING DIRECTOR



Poor boys, without any financial protection, follow the bullfights as bootblacks, eager to get into the ring in any kind of an amateur fight no matter how dangerous; practicing the various passes on each other, a passing waiter, a cab horse; riding under the seats of trains with their fighting capes rolled up as pillows; going for days without food when they have been put off a train somewhere by a conductor who catches them without a ticket; going through all the hell of the *capeas* or village fights where an old, experienced criminal of a bull is let loose in the barricaded square of a country town and all the aspirant bullfighters may practice with it or be practiced on by the bull. There was one such bull that was used in the province of Valencia which killed sixteen amateurs and crippled badly more than thirty others before the law forbidding *capeas* was enforced and the bull was finally sent to the slaughterhouse. Boys following this method of learning to bullfight get the worst of it first, but they do not have to worry about having their confidence suddenly destroyed by their first wound or by some bull that may have other ideas than to follow the cape.

A bullfighter may spend some years as a *novillero* or killer of young or defective bulls. Unless he has rich backing he will kill no young bulls. Those will be saved for the young phenomenons who are being rapidly pushed ahead by people interested in their careers. The average aspirant bullfighter will have to contend with bulls which are too big, too old, too dangerous to be accepted by the artistic heads of his profession. He will be wounded again and again; in all his fights as a *novillero* he will never get up to a thousand dollars a performance, and he will have to spend a good part of what he makes on publicity and propaganda in the bullfighting papers; but if his physical means and his passion for bullfighting remain intact, then, finally, he may be made a *matador de toros* or formal bullfighter. He will then be in competition with the sixty-one other matadors in Spain who were in practice in 1929.

If he gets to the top he will make $200,000 a year in the best years of his life, he does not have to pay income tax on what he earns, and he should, if he can stay near the top, make over $100,000 a year for at least six years. But if he does not get to the top he will have the same dangers, greatly increased because he will have to kill the bulls that are refused as too dangerous or unsuitable to their styles by the aces of the business, and he will make about twice as much as a street car conductor does in America.

So far only one American has entered this competition. He is Sidney Franklin, born Frumkin, of Brooklyn, N. Y., and I salute him. As a matador of *novillos* he has had some fifty bullfights in Mexico, killing all kinds of bulls in competition with local matadors. He had over seventeen fights in Spain last summer, three times filled the arena of Madrid to capacity, got his price up to $1,000 a fight, thinks, talks, and lives nothing but bullfighting, and hopes to be the greatest matador in the world. He has never been gored or badly wounded although he has been tossed frequently in the ring. He is very brave, very skillful, very artistic, and kills very well, and he explained to me how bullfighting was really not dangerous, that there is always a way to avoid being gored, that, in the words of Ricardo Bombita, it is not the bull who gores the man, but the man who gores himself on the bull by some mistake in technique; and I, who have seen nearly every bullfighter in the first twenty seriously wounded at least once,[8] wanted very much to believe him and hoped it was all true.

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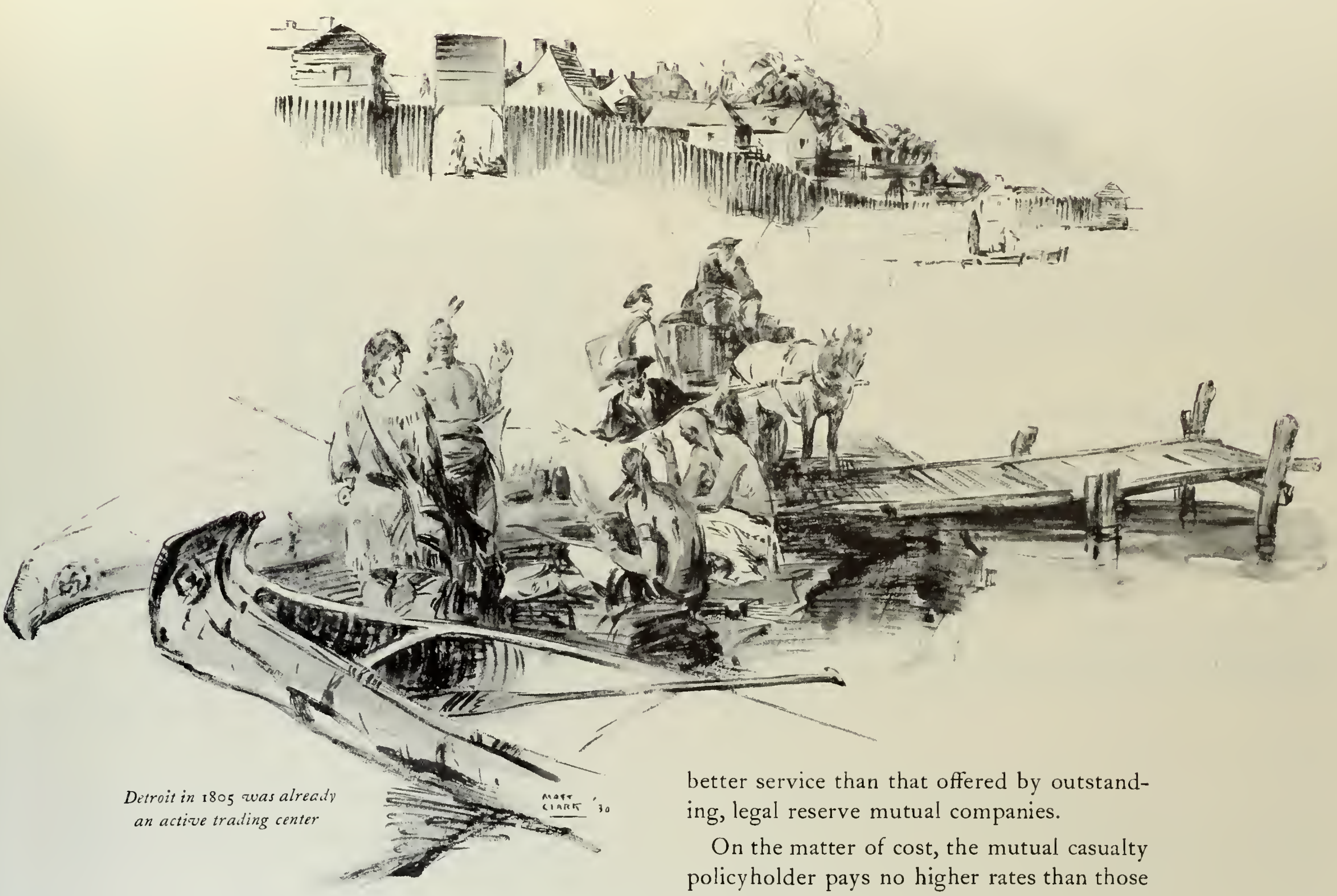

Detroit in 1805 was already an active trading center

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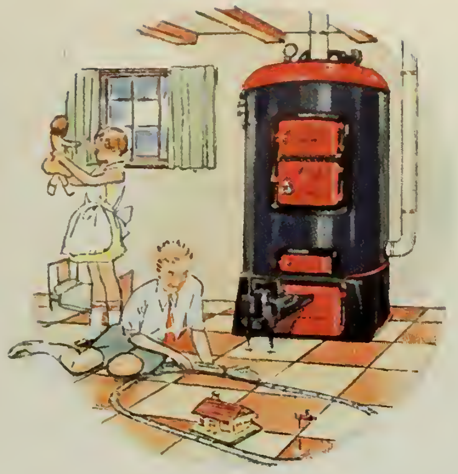

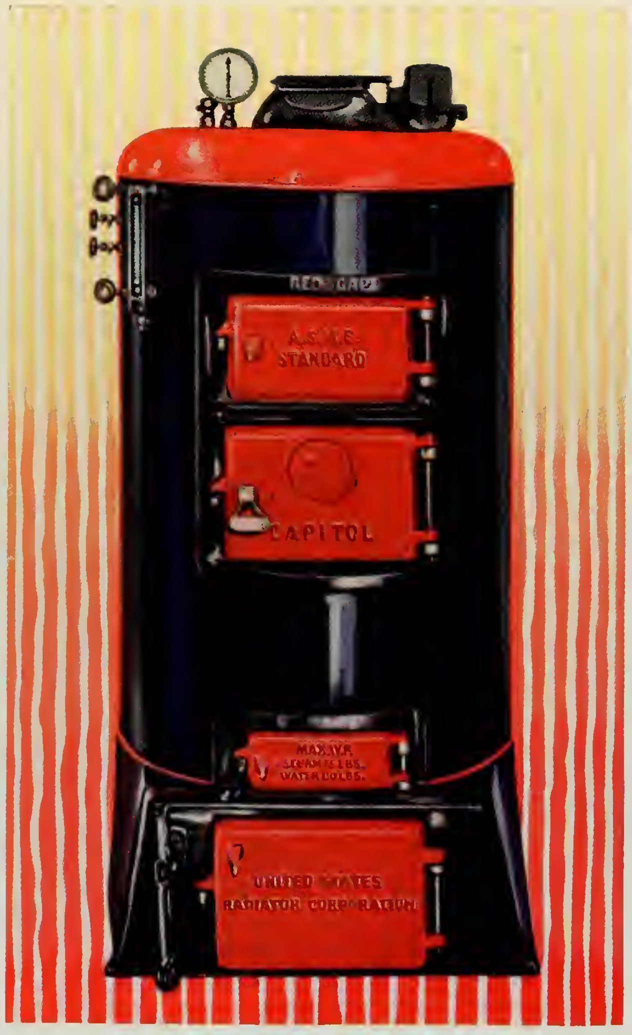

The Capitol Red Cap

Because it embodies every improvement known in round boilers, it is a good boiler to use with oil or any other fuel. A staunch jacket of baked enamel is in red and blue. A thick blanket of rock wool, the finest obtainable, suggests its quality in every particular

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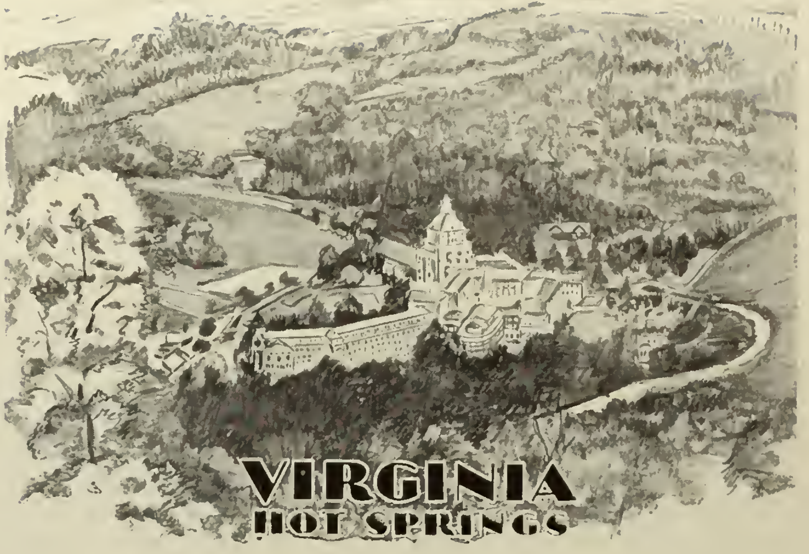

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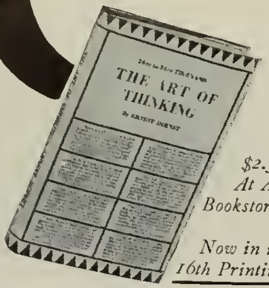

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Appendix

Notes on bullfights

[1] The rate of exchange throughout this article is figured at 14.83 cents per peseta, which is the mean rate for 1929.—*Ed.*

[2] Joselito died in the ring May 16, 1920, eight days after his twenty-fifth birthday, from a horn wound in the abdomen inflicted by "Bailador," or the dancer, a bull bred by the widow, Ortego of Talavara de la Reina.

[3] Some breeders only allow the calf to charge the horse and push against the steel spike once or at most twice, marking the animals for the way in which they go in rather than the number of times. This on the theory that each bull will only charge the steel a certain number of times and that it is better to save his performance for the ring rather than use it up in the fields. However, a really brave bull will charge and recharge as long as his legs will carry him forward.

[4] Miura bulls in spite of their tragic history are not at the present time as dangerous as those of Palha. These bulls, raised in Portugal, are of the old Miura strain but on the ranch where they are raised their pastures are eight miles from the stream they must go to for water. That 16-mile-a-day training has produced the strongest, and, due to the original Miura and Verogua strain not having been tampered with to cut down size and horns, the most formidable bulls of the present time. They are too dangerous for any bullfighters but those in a desperate financial situation to face.

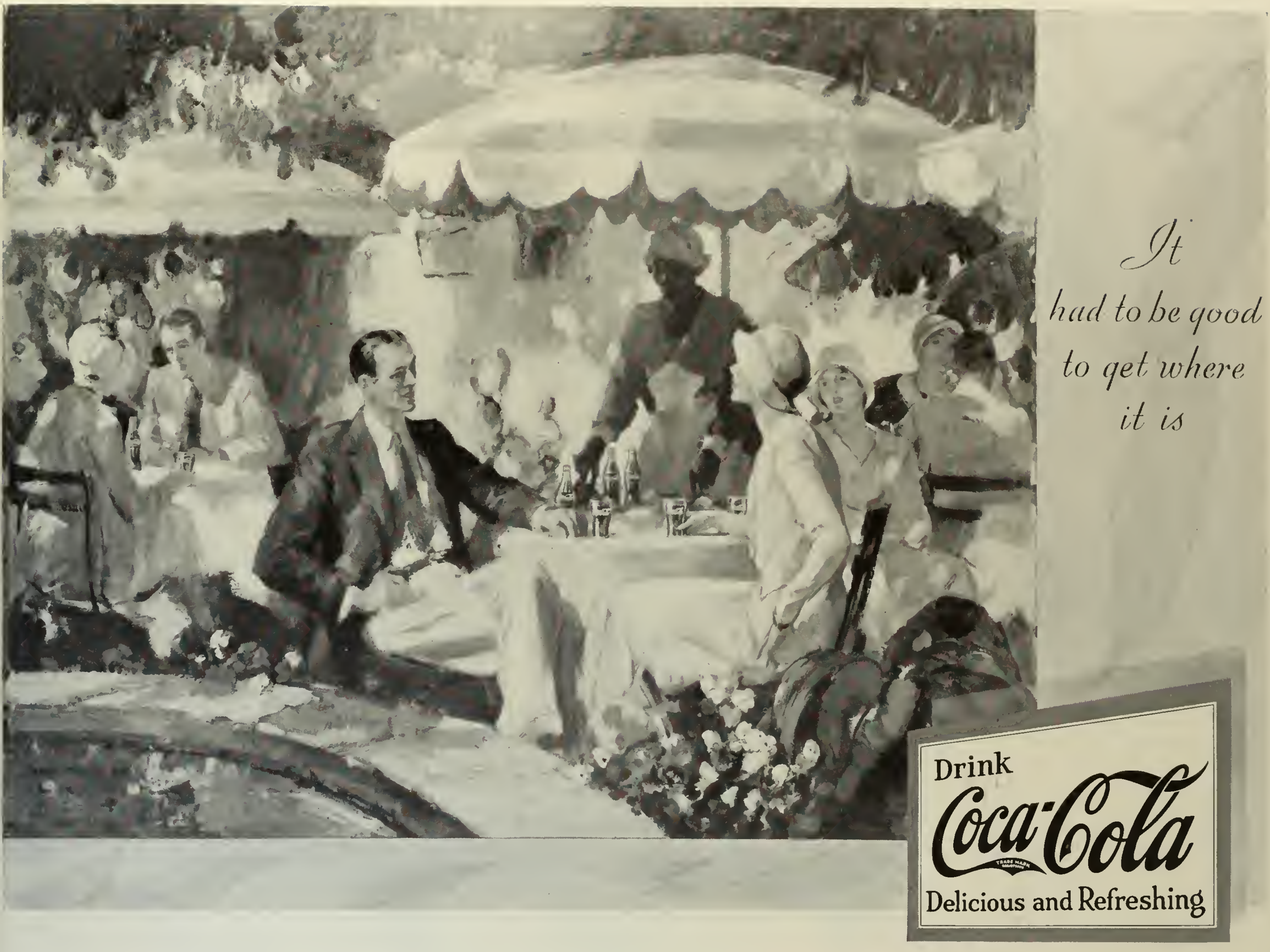
[5] Matadors are so well organized that their standard contracts contain a clause that the promoter must pay any and all fines incurred by the matador if his work is defective. For this reason the authorities hesitate to fine a matador sometimes when he is cowardly, knowing they are not punishing him but the promoter. This clause in matadors' contracts has just been forbidden.

[6] Formerly bullfighters and their *cuadrillas* traveled by train and many improvements in Spanish train service might be traced to the necessity for providing fast trains to deliver Joselito and Belmonte from one part of the country to another overnight during the great years of their rivalry—between 1914 and 1920—when they each gave sometimes over 100 fights a year in Spain alone. Competition and rivalry between matadors, each out of pride trying to outdo the feats of the other, is what brings bullfighting to its highest point. And the demand to be present at this great competition had no small effect on railway service.

[7] The wounded matador cannot go into the ring at once again, as an aviator tries always to go up after a crash, because there is usually, after a goring, grave muscular damage to repair even when no arteries have been severed or cavities in the body opened. The most common place a matador is gored is in the right thigh between the groin and the knee. It is there that the bull's horns come as he lowers his head to hook. The great danger, of course, is the severance of the femoral artery. The matador's sword handler who follows him from the inside of the barrier, in order to be near him wherever he is playing the bull, carries always a rubber cup to be clapped over a possible horn in the thigh to arrest the hemorrhage of the femoral (the largest artery in the body) while the matador is being carried to the operating room. A matador's first thought when he is gored badly, and knows it, is to arrest this hemorrhage, which coming from the big femoral could empty his body of blood before he ever reached the operating table. I have seen a matador rise from the ground after the bull dropped him, clap his hands to his thigh, the fingers trying to contain the hemorrhage and run for the barrier crying out, "The rubber! The rubber! You . . . Where's the rubber?"

Because the man has usually revolved on the horn there are usually several trajects to the wound. The artery must be tied, then all these divergent tears and directions of the main wound opened and cleaned or gangrene or infection are inevitable. There has been a special technique of surgery developed for horn wounds. The most famous practitioners of bull wound surgery are Dr. Segovia of Madrid, Dr. Serra of Valencia, and Dr. St. Sebastian of Bilbao.

[8] For instance this year, out of the first twelve bullfighters, Vicente Barrera was gored badly and gravely wounded once, Valencia II once, Nino de la Palma once, Marquez once, Chicuelo twice, Gitanillo de Triana twice, Enrique Torres twice, and Algabeno once. That makes eight out of the first twelve who were dangerously and gravely wounded last season. Of the four others who were not gravely wounded last year, there is not one who has not received one or more serious wounds which have kept him weeks in bed and endangered his life during past seasons.



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